



TRAINING
AND
CAREERS
IN
PHARMACY



C & D

CHEMIST AND DRUGGIST

MAY 17 1969

The Cow & Gate story... continued.

Others have confidence
in Cow & Gate Milk Food. Confidence
that comes from warm and reassuring
advertising; confidence that comes from
professional recommendation like yours.
The confidence story will be seen by
millions of mothers through whole page
advertisements in WOMAN,
WOMAN'S WEEKLY;
WOMAN'S REALM,
Medical and Nursing journals;
advertisements in local newspapers,
television in selected areas, and full colour
advertisements in Baby journals.
The Cow & Gate story—
powerful advertising that ensures
continually increasing sales.



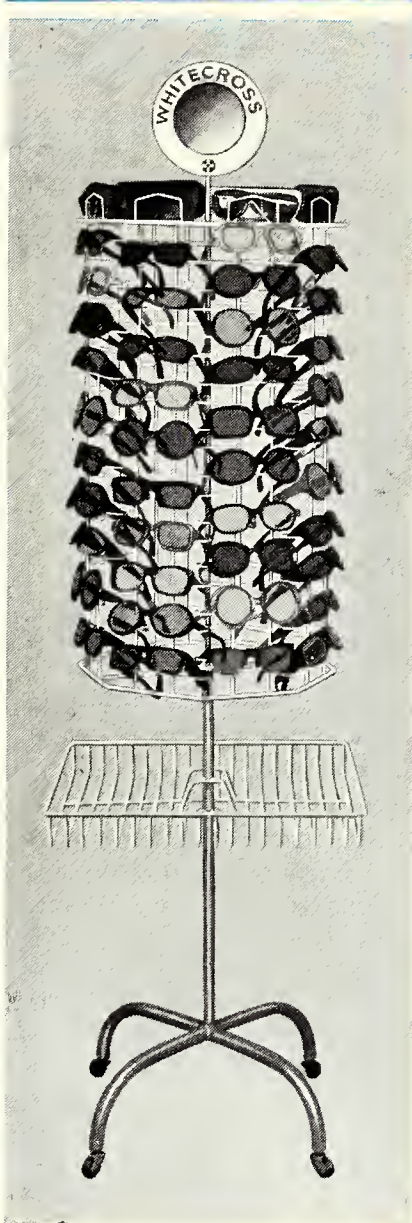
COW & GATE
The milk food of Royal babies

GLAMOUR WITHOUT GLARE



Whitecross

for 1969



THE WHITECROSS 'VOGUE' UNIT

comprising:-
5 dozen assorted
sunglasses retailing
from 10/6 to 17/6

**COST OF COMPLETE UNIT
TO RETAILER £28. 7. 0.**

THE WHITECROSS 'BELVEDERE'

This revolving floor display stand on castors
with merchandising tray **FREE**
with a fashionable range of

- 21 dozen assorted sunglasses
retailing from 2/6 to 10/6 each
- and 2 dozen assorted clipovers
retailing at 6/9 and 8/11 each

Cost of complete unit to retailer £59. 19. 4.

ALL OUR SUNGLASSES ARE AVAILABLE AS INDIVIDUAL LINES

**Ask for our comprehensive 1969 catalogue
showing complete range retailing from 1/- ea.**



THE WHITECROSS 'SUN-RAY' UNIT

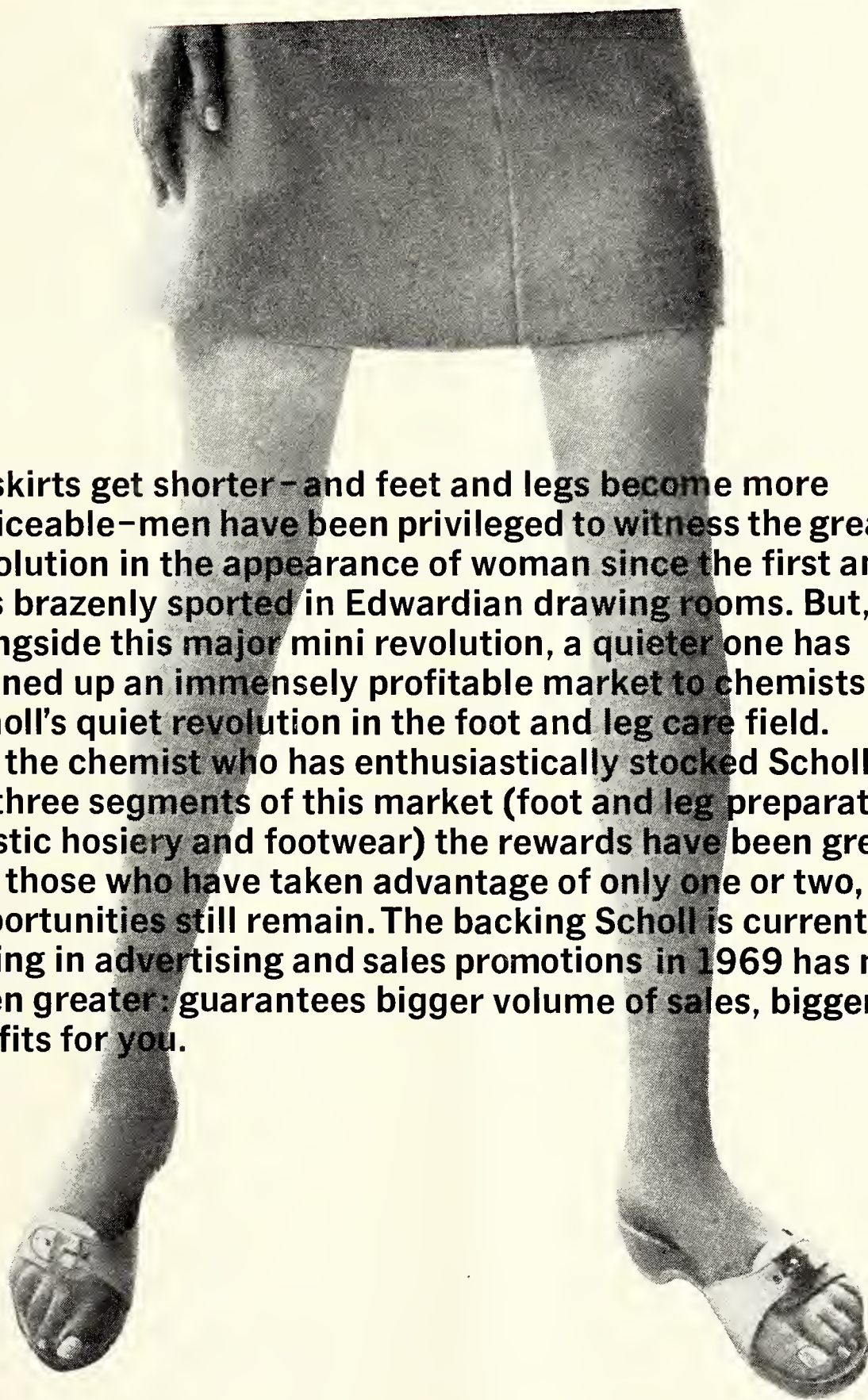
comprising:-
11 dozen assorted
sunglasses retailing
from 3/11 to 9/11 each
and 1 dozen clipovers
retailing at 6/9 each

**COST OF COMPLETE UNIT
TO RETAILER £32. 15. 4.**



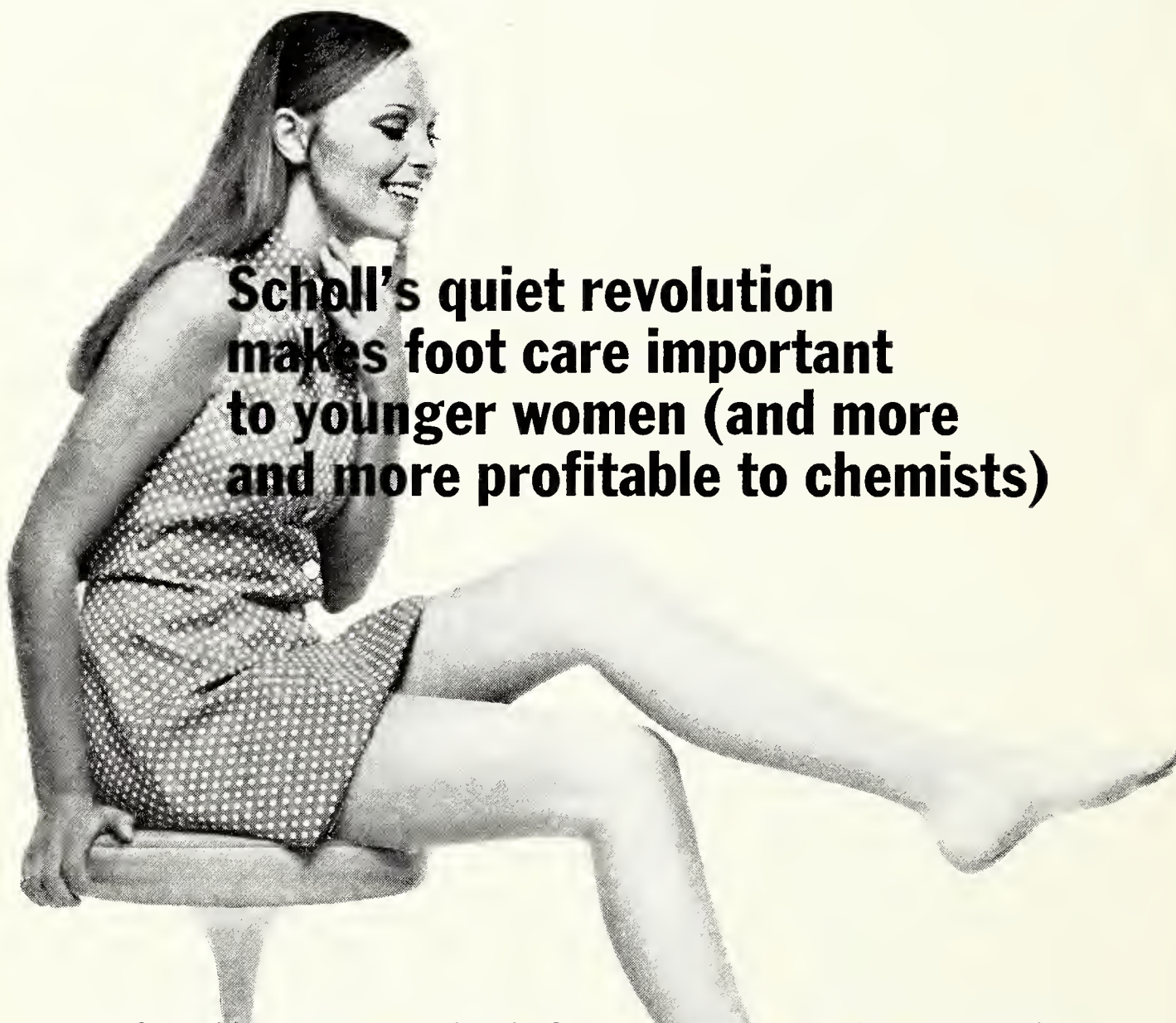
THE WHITECROSS OPTICAL COMPANY OF LONDON

(Proprietors: Fredk. Lehmann Co. Ltd.) Frederick Works, Rochester Place, London N.W.1. Tel. 01-485 6731



As skirts get shorter – and feet and legs become more noticeable – men have been privileged to witness the greatest revolution in the appearance of woman since the first ankle was brazenly sported in Edwardian drawing rooms. But, alongside this major mini revolution, a quieter one has opened up an immensely profitable market to chemists: Scholl's quiet revolution in the foot and leg care field. For the chemist who has enthusiastically stocked Scholl in all three segments of this market (foot and leg preparations, elastic hosiery and footwear) the rewards have been great. For those who have taken advantage of only one or two, opportunities still remain. The backing Scholl is currently giving in advertising and sales promotions in 1969 has never been greater: guarantees bigger volume of sales, bigger profits for you.

Scholl's quiet revolution



Scholl's quiet revolution makes foot care important to younger women (and more and more profitable to chemists)

Something has happened to the foot care market in the last three years. In original and topical advertising campaigns to millions and millions of women, Scholl have been talking—not of painful feet—but of “blemished” feet. Women of all ages—perhaps for the first time in history—are now conscious of their feet. And doing something about them. Scholl have

extended their range to include modern foot toiletry products. The enormous activity in product and advertising terms has led to a growing return on foot care counter space; growing turnover, growing profits. The quiet revolution in foot care represents one of the major growth markets for chemists. It is being built—virtually exclusively—by Scholl.

Scholl build markets...



The spearhead of a revolution: “Hallo Foot” advertisements in dominant full page size in every major popular woman's magazine in Britain: half page advertisements, too, on products like Foot Refresher Spray, Foot Beauty Cream and Zino Pads in the same magazines: newspaper support for Formula SI and Onixol. The activity is immense: the rewards, for chemists can be impressive too.

Scholl


Scholl's quiet revolution makes elastic support hosiery big business for chemists

Scholl's vigorous promotion of Nylastik lightweight and Soft Grip standard weight elastic stockings has given chemists the opportunity to cover more than 90% of all the requirements of doctors and customers with just these two brands in a small range of standard sizes.

Because they're such high quality, Nylastik and Soft Grip almost invariably lead to repeat business: and it is repeat business which builds real profit in this field. Your customers will be so satisfied with Scholl Elastic Hosiery, they'll come back again and again. Naturally Scholl will replace a stocking without question but requests for replacements are very rare indeed, thanks to Scholl's rigorous quality control.


...and business... for chemists

Various sizes are not the end of the world
and Scholl's Elastic Hosiery is the answer.



Scholl Hosiery
The quality of Scholl's Elastic Hosiery is the result of a long and careful research into the needs of the customer. The result is a product which is both comfortable and durable. Scholl's Elastic Hosiery is available in a wide range of sizes and styles to suit all tastes and requirements.

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The advertising support Scholl give to their elastic support hosiery is unprecedented in this field. Not only heavy campaigns in the largest circulation women's magazines, but specialised campaigns directed at doctors, midwives and pregnant women, have made Scholl undisputed leaders of the market: an exclusive market Scholl make very rewarding for the pharmacy.

Scholl

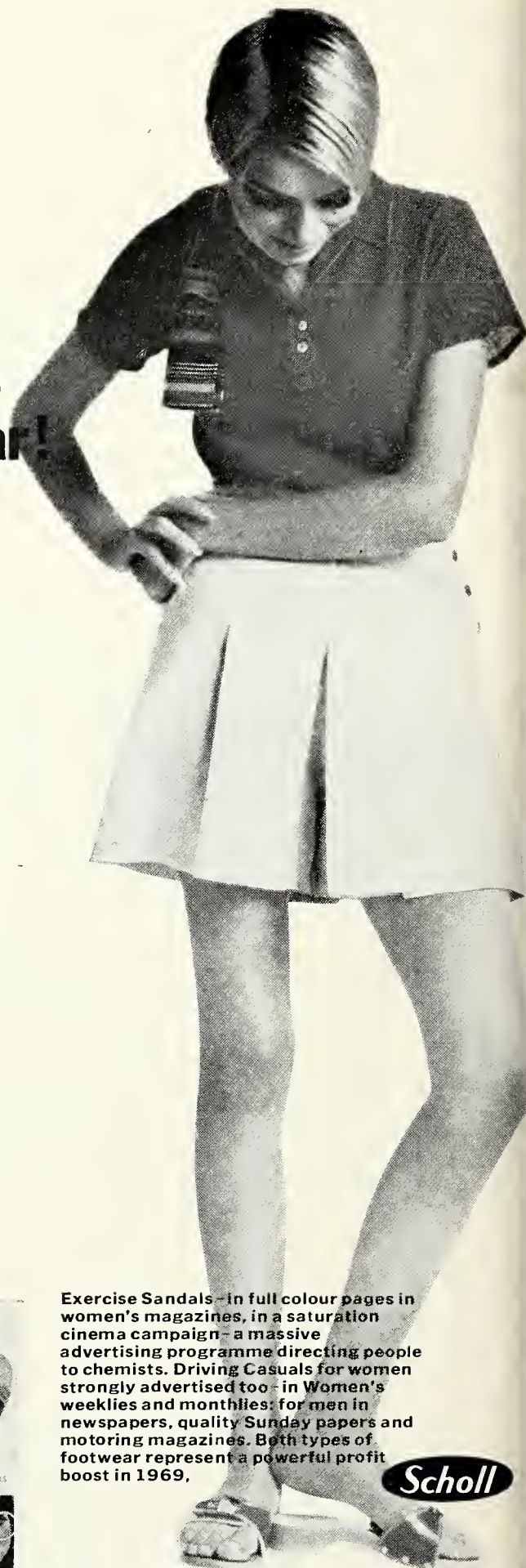


Scholl's quiet revolution makes profitable chemist's lines out of leisure footwear!

Scholl Exercise Sandals – or "Scholls" as they are often called – perhaps symbolise the quiet revolution most aptly of all.

Immensely successful, they are at one and the same time, completely feminine and acceptable to young women – and yet beneficial to feet. And because they're basically therapeutic, they're completely acceptable as a chemist's line.

Scholl Driving Casuals for women and men – also have the authority of the Scholl name behind them: sell particularly well in pharmacies which display them with the wood and leatherlook Exercise Sandals: offer real growth potential when treated in this way.



Exercise Sandals – in full colour pages in women's magazines, in a saturation cinema campaign – a massive advertising programme directing people to chemists. Driving Casuals for women strongly advertised too – in Women's weeklies and monthlies; for men in newspapers, quality Sunday papers and motoring magazines. Both types of footwear represent a powerful profit boost in 1969.

Scholl

STOP PRESS

NEW FROM PERMUTIT + MK17 LIGHTWEIGHT + MULTI-PURPOSE

PORTABLE DE-IONISER + PURIFIED WATER + INSTANTLY +

AT THE TURN OF A TAP + ANYWHERE + ANYTIME ++

Weights only 18 lb. Supplies de-ionised water ranging from ultra pure to distilled quality. Suitable for hospitals, laboratories, pharmacies, textile manufacture, chemical processing, cosmetics, metal plating, battery manufacture and servicing, photography, etc. No installation. No heat or power. Fast, nation-wide cartridge exchange service. Price £22. Cartridge-spare £8. Book of 5 Vouchers £7. 10. 0 Output, 26 G.P.H. at a fraction of the cost of distilled water.

PERMUTIT

the first name in water treatment



PRICE £22

Complete with service cartridge

Please send me details of the Permutit Mark 17 De-ioniser

NAME

POSITION

COMPANY

ADDRESS

MY WEEKLY REQUIREMENTS ARE GALLONS

THE PERMUTIT COMPANY LIMITED

Pemberton House, 632/652 London Road, Isleworth, Middlesex

Tel: 01-560 5199 Cables: Permutit London

Subsidiary companies in Australia, Canada, India and S. Africa. CD 5

Ilford snaps into '69 w range that's still unde



an instant-load 5 gns.

THE CHEMIST AND DRUGGIST
6 May 17, 1969 7

The 1969 Ilfomatic range of 3 popular, fast-moving cartridge cameras kicks off at *54/-. The most sophisticated — the Ilfomatic Universal Flash Kit retails at under 5 gns. — not bad when you consider that the equivalent in the 'other fella's' range is about £2 dearer. They all take standard cartridge film. And there are profit packed, comprehensive flash outfits, too!



UNIVERSAL 50C CAMERA

Sports a 2-element, optically worked lens and a 2-speed shutter with symbol setting for the weather. Built-in socket for flash cubes.

UNIVERSAL 50C OUTFIT

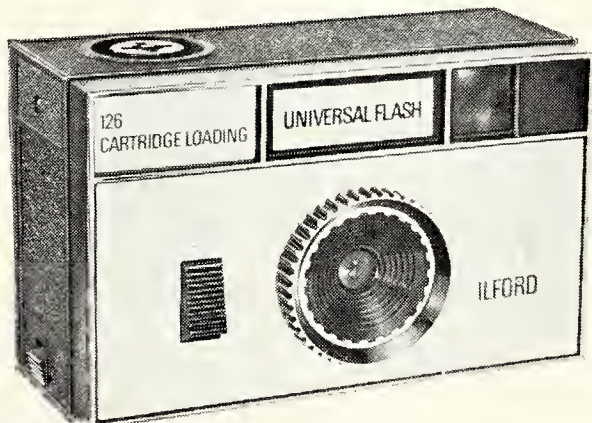
Ready for instant use. Includes camera, 2 films, 2 batteries, 2 flash cubes (for 8 shots) and wrist strap. Wonderful value — a quick seller.

COMPACT CAMERA

Just the job for those who simply want to point and shoot. Fixed focus and speed set for all weather. Takes a flash-gun for indoor shots.

COMPACT PACK

All that's wanted by the holiday-maker. Includes the camera with case and one film. Can be broken down for separate sale.



UNIVERSAL FLASH CAMERA

Offers luxury convenience with its automatically rotating built-in flash cube holder. Factory set lens and shutter.

UNIVERSAL FLASH OUTFIT

Complete with camera, wrist strap, batteries, 1 film and 3 flash cubes (12 shots). All that's wanted for indoor and outdoor pictures.

Call in the Ilford rep — and cash in on the current Ilford offer.

*Recommended Retail price



ILFOMATIC

Amateur Products Division,
Ilford Limited,
Ilford, Essex.

André Philippe



SPECIALISTS IN HAIR LACQUER AEROSOLS AND REFILLS

PLEASE write for prepaid order form

ANDRE PHILIPPE LTD., 71-71B GOWAN AVENUE, FULHAM, LONDON SW6

Tel: REN 2194/2397 Cables: "Andrephil", London.

The only
**BEVELLED
TONGUE
DEPRESSOR**
in the world

Applicators also available

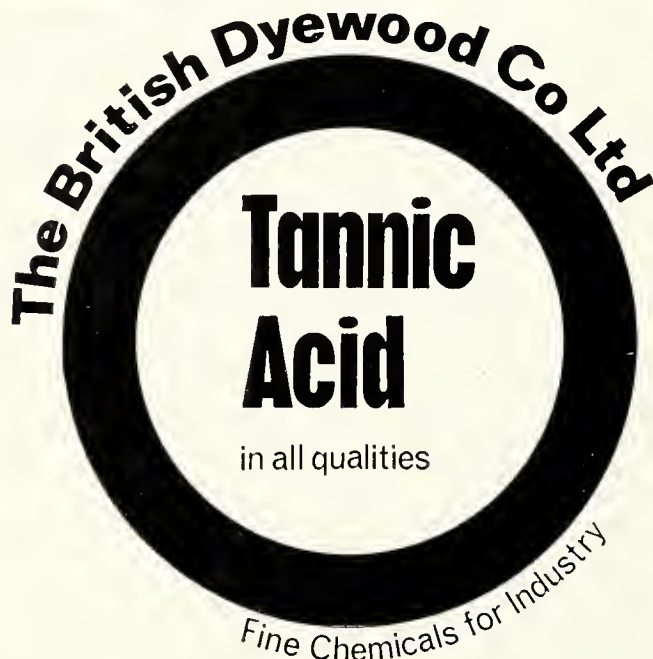
ASHWOOD TIMBER & PLASTICS LTD.
Leven Rd., London, E.14. Phone: East 6461 & 6343



The famous Calabrian (Italian) brand Licorice

YESTAMIN

**Trent Yeast Extract Co. Ltd. (English Grains),
Trent House, Wellington St. Extn., Burton-on-Trent**



The British Dyewood Company Ltd

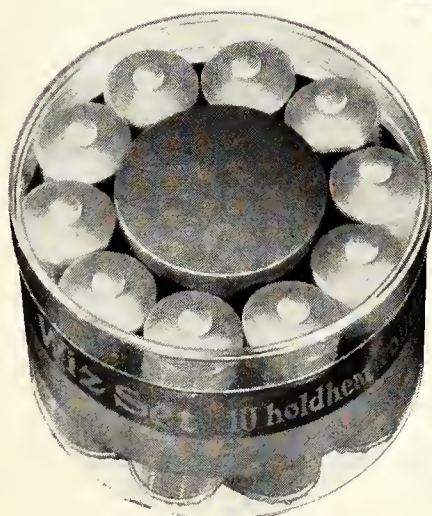
Head Office, 19 St. Vincent Place, Glasgow C1.
Tel: CENTral 4425

10 Victoria Street, Liverpool 2.
Tel: CENTral 5272

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Wiz Set has grown up



This is the continuing story of Wiz Set, the brand of hold heat rollers that was launched onto an unsuspecting market last year. Now Wiz Set has taken on a new look attractively packed in ten count acetate drums, (left) with a free take-home box for every customer. The drums are displayed in a new counter stand (right) in sets of six. Stock up with the grown-up Wiz Set packs now, and stand by the cash register.



**newey
goodman**

Newey Goodman Ltd.,
Robin Hood Lane,
Hall Green,
Birmingham.



What's new on the Factor Front?

A BIG SOFT SELL!

NEW SHADES OF SOFTNESS IN FOUNDATIONS

Max Factor captures the fashion mood of the moment with five new foundation shades of softness, designed to give delicate, luminous looks. And a new range of 'Translucent'

Powder to guard and 'set' these new soft shades. A perfect 'Finish' to their fresh appeal. New shades of foundation available in Sheer Genius, Hi-Fi Fluid Make-Up and Pan Stik.

Ivory Touch*. Just Fawn. Honey Touch*. Gay Glance. Cool Copper.

And the New Translucent Powder 'Ivory'. 'Honey'. 'Cinnamon'.

Stock up with Max Factor's new shades of softness – you'll see soft selling is simple selling.

**In Sheer Genius and Hi-Fi Fluid only*

The Soft-Selling Advertising

1½ pages of full colour, will tell the 19 and more million readers of **Woman** and **Woman's Own** how to choose and how to use a Max Factor foundation. And bring them in to your shop for the new shades of softness.



The Soft Sell In-Store

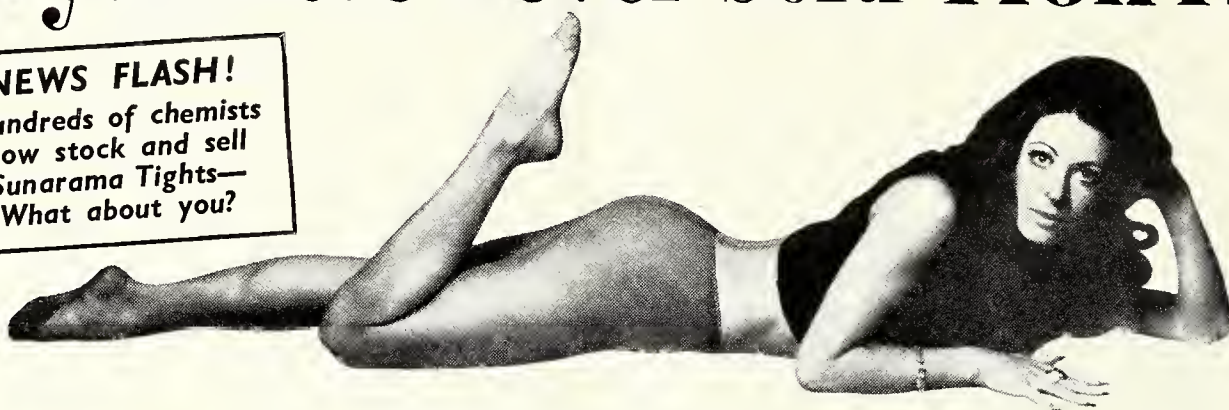
This special self-selection unit carries the new soft shades in Sheer Genius, Hi-Fi Fluid Make-Up and Pan Stik together with the New Translucent Powder range. Let it soft sell the new shades of softness for you.

Be sure to order the special 51 piece promotional pre-pack comprising 18 units Sheer Genius, 12 Hi-Fi Fluid Make-Up, 12 Pan Stik and 9 Translucent Powder—all in the new shades of softness. NOW!

The new shades of softness by MAX FACTOR

So you have never sold TIGHTS!

NEWS FLASH!
Hundreds of chemists
now stock and sell
Sunarama Tights—
What about you?



or maybe you have and already know about the quick turnover and the big profits you can make.

Sunarama[®] OF LONDON *Make it easy for you with their* **ONE SIZE TIGHTS**

**50% PROFIT
FOR YOU**

ANTI-LADDER (NON-RUN)

- ★ Superb Quality Manufacture
- ★ Fit all up to 40" hips
- ★ Wrinkle Free Super Crepe
- ★ All Sheer to Waist

ONLY **71'6** DOZEN INC. P. TAX

TO RETAIL AT ONLY 8/11 PAIR
LATEST 1969 SHADES -
Venus (Tan), Neptune (Light Tan), Saturn (Mid. Beige.)



Free Counter Dispenser holds 3 doz

Why don't you give them a try and send for a trial 3 dozen (One dozen of each shade) in our Free Counter Dispenser Unit. Takes up the minimum of counter space (only 9½" x 11½") yet makes an eye catching point of sale display your customers won't be able to resist. Take advantage of our 6 weeks' Trial money back guarantee terms.

To Sunarama Ltd., Sunarama House, 72/74 Eversholt Street, London, N.W.1. Telephone: 01-387 9838

- ☐ I enclose £10.14.6. Please send carriage paid, 3 dozen One Size tights in Free Counter Dispenser Unit.
- ☐ I enclose 7/6. Please send sample pair of One Size Tights and details of other Sunarama fashion tights and stockings.
- ☐ I am a Sunarama stockist and would like your representative to call.

Name

Company

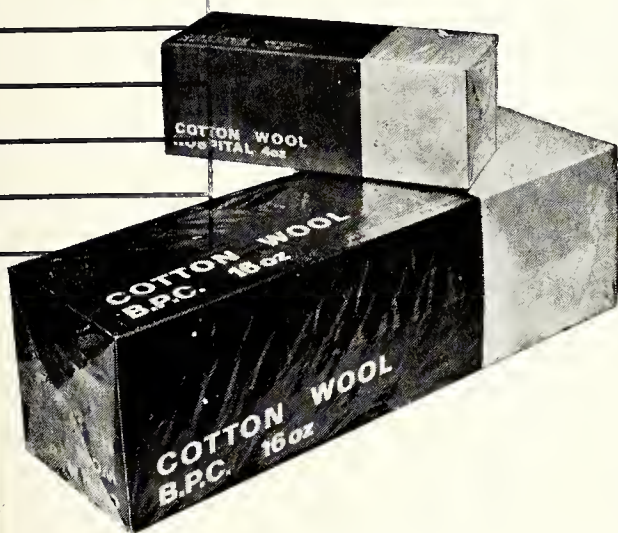
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COTTON WOOLS

in cartons from
ILLINGWORTHS

WELLCOME INSTITUTE
LIBRARY

Wellcome



Smart polythene-wrapped blue and white packs. Modern looks, more convenience maximum hygiene. 1 oz., 4 oz., 16 oz., sizes. B.P.C. and Hospital Qualities.

Also in Rolls

Pleated in Polythene Bags

Bottle Neck Wool

Respirator & Filter Pads

Blended Wool

A high quality product of
E. ILLINGWORTH & CO. (BRADFORD) LTD.
Shelf Mills, Shelf, Nr. Halifax
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Telex: 51632



CHEMIST AND DRUGGIST

ESTABLISHED 1859

THE WEEKLY NEWSPAPER FOR PHARMACY
and all sections of the drug, pharmaceutical,
fine chemical, cosmetics, and allied industries
*Official organ of the Pharmaceutical Society of Ireland
and of the Pharmaceutical Society of Northern Ireland*

Volume 191

May 17, 1969

No. 4657

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ANNUAL SUBSCRIPTION

which includes The Chemist and Druggist Year Book and
Buyers Guide, £5. Single copy 2s. 6d. (including postage).



MEMBER OF THE AUDIT BUREAU OF CIRCULATION

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Free sachet of new Sunsilk Herb Shampoo with every special can of Sunsilk Hair Spray

There's a free sachet of new Sunsilk Herb Shampoo—worth 11d to your customers—with all three kinds of Sunsilk Hair Spray.

Sunsilk is already the leading hair spray brand in Chemists. Now

the Sunsilk Herb Shampoo sachet will send sales up even higher. Make this promotion work for you. Give the special cans a big showing. They'll earn it.



Sunsilk Hair Spray
for normal, dry or greasy hair



Elida Paris • Vienna • London
Sunsilk Shampoo; Sunsilk Hair Spray; Harmony,
Sea Witch, Melody, Wood Nymph; Pin-Up, Twink; Shine,
Cream Silk.



C&D

CHEMIST AND DRUGGIST

Volume 191

MAY 17, 1969

No. 4657

A Penny More Per Script

CHEMIST contractors will receive an additional one penny on every prescription dispensed on or after April 1. The Department of Health has also agreed to a container allowance of twopence per prescription from March 3.

The changes were announced at the Torquay meeting of the National Pharmaceutical Union (see p. 428) when it was stated that, in their "final" remuneration offer of November 1968, the Department of Health had indicated that, although by the spring of 1969 the overpayments made to chemist contractors would not be wholly offset, the Department would then be prepared to reconsider the forecast balance sheet for 1969 with a view to increasing rates of payment by one penny. Although the rise in ingredient cost of over sevenpence per prescription in 1968 had resulted in a "hidden increase" in on-cost, the Central N.H.S. Committee submitted a claim for an increase of one penny and the Department agreed. When the results of the current remuneration inquiry have been collated the present fee scale will be revised to take in the additional payments. The Department has been advised that the Committee will require a separate fee to be paid for each additional bottle ordered by the prescriber on one form E.C.10 of an extemporaneously prepared mixture. A notice of the increase will be given in E.C.N. 793, which makes it clear that a halfpenny of the additional one penny is considered as restoring the reduction made in 1967 to recover excess payment to the end of 1966.

Containers Specified

The increased container allowance (twopence against 1.91d.) takes account of the cost of metric spoons and of the cost of rigid, i.e. plastic, glass or aluminium containers, for all prescriptions calling for tablets, capsules, etc., other than those already foil packed. It will therefore be a requirement that, for all prescriptions dispensed on and after June 1, all tablets, other than those foil packed, capsules, etc., must be dispensed in suitable plastic, glass or aluminium containers. The 1968 container inquiry showed that for ointments three out of every four containers supplied by the pharmacist were either glass or plastic. The Department of Health has also asked the Central N.H.S. Committee to consider taking "this opportunity of recognising the improved standards which pharmacists themselves are

using for dispensing for ointments by discontinuing the use of boxes seamless and sealite containers for ointments also." A further inquiry into costs of spoons is to be held in the spring of 1970.

Five-day Week

MIDDLESEX Executive Council is seeking approval to amend the Hours of Service scheme to allow the closing of some pharmacies in an area on a second half-day each week. The amendment is in the following terms:—

Where an application is made to the Committee by more than one chemist or by the Local Pharmaceutical Committee that in any district all the places of business need not be opened on the morning of the early-closing day or some other morning or afternoon covered by the minimum hours of business, the Committee shall have power to consent to such application subject to such conditions (if any) as they think necessary for the purpose of securing an adequate pharmaceutical service. If such consent (which shall not be withheld unreasonably) is given, the hours of business for the purpose of this scheme shall be varied accordingly. The Committee shall

have power to withdraw such consent if such arrangements are not maintained or if, on reviewing the adequacy of the pharmaceutical service provided, they are satisfied that the consent ought to be withdrawn.

According to the May issue of *Executive Council* the Hours of Service Committee had received a report on the operation of the five-day week and on arrangements used by multiple pharmacies. The trend favoured the system whereby the pharmacy provided a six-day service while the individual staff members worked only five days. The committee has approved in principle that two individual contractors, operating in quiet side streets with adequate service from other contractors nearby, should be allowed to operate a five-day week.

Bottle Shortage

RECENT shortages of metric medicine bottles should soon be eased, it is understood. Beatson, Clark & Co., Ltd., Rotherham, a major supplier to chemists' wholesalers, say that the large initial demand created shortages, particularly in some sizes, but that they are now able to keep up with orders. United Glass, Ltd., Staines, Middlesex, say they have some stocks and would welcome inquiries from wholesalers. In Parliament on May 9, the Secretary for Social Services told Mr. A. Booth that, during the



WORLD SALES CONGRESS IN LONDON: Polaroid (U.K.), Ltd., were hosts in London recently to executives from the Polaroid Corporation in the United States and from Polaroid subsidiary companies all over the world who are involved in the production and distribution of Polaroid sunglasses. Subject of the recent deliberations was new designs for the 1970 Polaroid sunglass collections, materials, manufacturing and assembly techniques.

shortage, pharmacists could dispense the prescribed quantity of medicine in remaining imperial measure bottles.

MR. ALBERT HOWELLS (president, Pharmaceutical Society), has written to all members of the Society in England and Wales calling upon them to write in protest to their Members of Parliament against Mr. R. Crossman's refusal to amend the rural dispensing rules. Branch officers are being asked to lobby their M.P.'s in the constituencies. For Scotland, Mr. Adam Roxburgh (chairman, Scottish Executive) has urged members to address their protest to Mr. Crossman himself.

Pesticides Data

TWO new committees on the collection of pesticide residue data have been formed. The Committee for Analytical Methods for Residues of Pesticides and Veterinary Products in Foodstuffs, and the Panel for the Collection of Residues Data will replace, respectively, the Analytical Panel and the Panel on Residues of Pesticides in Foodstuffs.

Photo Sales

A JUMP in exports to the tune of 53 per cent. boosted manufacturers' deliveries of photographic equipment in the fourth quarter of 1968. The total value was £31,529,000 which included a 5 per cent. rise from the home market. Giving those figures, the Board of Trade's *Business Monitor* shows the largest rises were to be found in the sales of cine-cameras (up 72 per cent.); miniature photographic cameras (14 per cent.); and "other" photographic apparatus, 26 per cent. Exports of almost every category increased, the largest rises being those of cine-cameras (over 300 per cent.); photographic cameras (over 200 per cent.); image projectors (82 per cent.) and "other" photographic apparatus (76 per cent.). Exports of cine-film increased by the largest margin for several years. During 1968, total deliveries rose by 20 per cent., exports by 35 per cent. and home deliveries by 9 per cent.

Sugars in Foods

REPLACEMENT of sucrose by liquid glucose in some manufactured foods may be beneficial, report workers at Beecham Products (U.K.) and the Huntingdon Research Centre (*Nature*, May 10). In tests on baboons they have shown that calories supplied by liquid glucose lead to less deposition of body fat than calories derived from sucrose. The authors point out that both liquid glucose and starch give only *d*-glucose (dextrose) after digestion, whereas sucrose appears in the blood stream as *d*-glucose and fructose. Fructose may therefore be the fattening element since the body will accept much larger quantities of it when it is provided through the medium of sucrose, than when fed alone (a high intake of fructose itself usually causes diarrhoea in humans).

Training Panel

THE Chemical and Allied Products Industry Training Board has set up a "small firms' advisory panel." The panel's fifteen members are senior executives of companies with fewer than 100 employees and they will give the Board the "small firm" view on new proposals at the drafting stage. It is hoped also that they will assist in the preparation of a booklet designed to help such companies in handling grant and levy matters.

SCOTTISH NEWS

New Branch

A LANARKSHIRE Branch of the Pharmaceutical Society is being formed as a result of a meeting held in Hamilton on May 8. Forty members of the Society attended and nine apologies for absence were received. A postal inquiry by the resident secretary in Scotland (Dr. G. H. Macmorran) among 246 members in the

area (see *C. & D.*, March 29, p. 270) had shown that sixty-seven were willing to support a Lanarkshire branch while twenty-eight were against its being set up. The meeting elected Mr. J. Paton, Bells-hill, *Chairman* and Mr. C. R. Blythe, 81 Ayr Road, Douglas, Lanarks, *Secretary*.

OVERSEAS NEWS

UNITED STATES

Labelling of Cyclamates Products

NEW labelling requirements for food products artificially sweetened with cyclamates have been proposed by the United States Food and Drug Administration. The changes are intended to make it practical for consumers to follow the recommended limits. Food containing cyclamates would require a declaration of cyclamate content in milligrams. For beverages, the label would list the total cyclamate content of the can or bottle. For other foods, the label would show the number of milligrams of cyclamate in a normal serving and state that adults should not ingest more than 3,500 mg, or children more than 1,200 mg of cyclamate per day. The regulation would also limit cyclohexylamine content to not more than 25 parts per million.

Fixed Combinations "Ineffective"

THE United States Food and Drug Administration has given notice that it intends to start action to end the marketing of seventy-eight antibiotic-containing drug products. The decision was based on recommendations of the National Academy of Sciences-National Research Council. Generally, the seventy-eight products were found ineffective as fixed combinations for claims made in their labelling. That did not necessarily mean that either the antibiotics or other active ingredients of the products were ineffective when used alone. "But the use of two or more active ingredients in the treatment of a patient who can be cured by one is irrational therapy," said Dr. Herbert L. Ley, Jun. (Commissioner of Food and Drugs). "It exposes the patient to an unnecessary risk." The majority of the products listed were antibiotic-sulphonamide combinations in tablet, capsule, or liquid form. Also included were sixteen penicillin-streptomycin combinations given by injection. Other antibiotics used in the preparations include erythromycin, neomycin, tetracycline, chlortetracycline, nystatin, oxytetracycline, oleandomycin, and triacetyloleandomycin. In addition, some of the preparations contain analgesics, vitamins, or other ingredients.

LOCAL OFFICERS

PHARMACEUTICAL SOCIETY BRANCHES

Thames Valley.—*President*, D. V. Smith; *Vice-president*, Mrs. A. M. Carpenter; *Treasurer*, H. G. Moss; *Social Secretary*, D. W. Higgins; *Secretary*, F. H. Barton, c/o Goulds Pharmacy, 500 Walton Road, East Molesey, Surrey.

Liverpool.—*Chairman*, W. C. Tristram; *Vice-chairman*, J. C. Leigh; *Secretary*, A. E. Hunter, 164 Prescott Road, Aughton, Ormskirk, Lancs. The foregoing with the addition of *Treasurer*, R. Clitherow are officers of Liverpool Chemists' Association.

Agricultural Chemicals

MORE APPROVED PRODUCTS

THE Agricultural Departments of the United Kingdom have approved the following products under the Agricultural Chemicals Approval Scheme.—

CHLORPROPHAM WITH FENURON AND MONOLINURON. A residual pre-emergence herbicide for the control of annual weeds in peas. LIQUID FORMULATIONS: Monotex (Bugge's Insecticides, Ltd.).

2,4-D SOLUBLE POWDER FORMULATIONS: Baywood 2,4-D soluble powder (Baywood Chemicals, Ltd.).

DICHLORPROP, SOLUBLE POWDER FORMULATIONS: Hormasol soluble powder (Baywood Chemicals, Ltd.).

DICHLORPROP with 2,4-D, SOLUBLE POWDER FORMULATIONS: Hormasol D soluble powder (Baywood Chemicals, Ltd.).

DICHLORPROP with MCPA, SOLUBLE POWDER FORMULATIONS: Hormasol M soluble powder (Baywood Chemicals, Ltd.).

PARAQUAT WITH MONOLINURON. A contact and residual herbicide for the control of annual weeds pre-emergence in potatoes. LIQUID FORMULATIONS: Gramonol (Plant Protection, Ltd.).

DISULFOTON, GRANULAR FORMULATIONS: Dimaz (Fisons, Ltd.).

MCPA, SOLUBLE POWDER FORMULATIONS: Baywood MCPA soluble powder (Baywood Chemicals, Ltd.).

Tropical Fruit Growing

FORTHCOMING CONFERENCE IN LONDON

FORTY experts on tropical fruit growing, harvesting, handling, storage, processing and marketing will address delegates from tropical and sub-tropical countries at a conference in London, from September 15 to 19. The conference is being organised by the Tropical Products Institute (part of the Ministry of Overseas Development), and will be concentrating on post harvest problems, though about fifteen papers on specific fruits and on agronomy are being given. Application forms for the conference may be obtained from the Scientific Secretariat, Tropical Products Institute, 56 Gray's Inn Road, London, W.C.1.

IRISH NEWS**THE REPUBLIC**

SOUTH Tipperary Pharmacists' Association's annual dinner and dance in aid of the Benevolent Fund of the Pharmaceutical Society of Ireland, held in Cahir on April 16, drew patrons from many parts of the south. Mr. J. P. Kissane presided and those attending included the president of the Society (Mr. T. R. Miller); the registrar (Mr. J. G. Coleman); and the president of the Irish Drug Association (Mr. M. A. Brophy). The Minister for Health was represented by Dr. G. Robins.

THE NORTH

THE office of the Ulster Chemists' Association will be closed on Spring Bank Holiday, May 26.

THE East Down Branch of the Ulster Chemists' Association entertained sixty-five guests, including the U.C.A. president (Mr. W. C. Magee) at their annual dinner in Killyleagh, co. Down, on April 23.

THE Ulster Chemists' Bowling Association's annual tournament in aid of the Northern Ireland Chemists' Benevolent Fund takes place this year at Belmont Bowling Club, Kincora Avenue, Belfast, 4, at 2.30 p.m. on May 28. Intending participants should inform Mr. A. E. Atkinson, 135 Oldpark Road, Belfast, 14, or Mr. S. Magowan, 438 Ormeau Road, Belfast, 7.

"COUNTRY or Western" dress is the order of the day at a barbecue and barn dance which the associates' section of the Ulster Chemists' Association is putting on at the Dunadry Inn, co. Antrim, on June 5. The event starts at 9 p.m. (closing time unspecified). Tickets 35s. each, are obtainable from the Associates' office, 73 University Street, Belfast (telephone 20787).

NEWS IN BRIEF

THE Medical Research Council is setting up a unit for physical aids for the disabled at Princess Margaret Rose Orthopaedic Hospital, Edinburgh.

REPRESENTATIVES of doctors in Scotland have accepted the principle of unification established in the Green Paper on the "Administrative Reorganisation of the Scottish Health Service." Area boards should have at least 50 per cent. professional representation, it is recommended.

THE drug industry could do much more for departments of clinical pharmacology, says the *British Medical Journal* in a leading article (May 10). The *Journal* mentions a "trial marriage" between one such department and a drug company and suggests that, if it is successful, more companies may be willing to co-operate in joint ventures designed to improve the standards of therapeutics in Britain.

THE complete list of 993 articles designated as "tentatively admitted" to the United States National Formulary (N.F. XIII) has been released by the N.F. Board. It is expected that no further changes will be made between this list and the final list. Copies are available from the National Formulary, 2215 Constitution Avenue, N.W., Washington, D.C., 20037, U.S.A.

TOPICAL REFLECTIONS**By Xrayser***Self-medication*

It was perhaps natural that the subject of rural dispensing and the attitude of Mr. Richard Crossman toward it should have usurped all of the space that was available last week. That was unfortunate, since there were other matters of importance in that issue on which I should have liked to comment, and that I feel I must now do, while they still have topical relevance. The pharmaceutical session of the congress of the Royal Society of Health (p. 394 *et seq.*) was of more than passing importance to the pharmacist in general practice who is the ultimate contact, in most cases, between the manufacturer of medicines and the public. The choice of speakers ensured that the points of view of a manufacturer, a pharmacist and a family doctor should be expressed. Dr. Henderson, in putting forward the case for the manufacturer, said that it would be foolish to deny that medication in the home had its dangers. There was, he said, always at least the theoretical risk that, when treating oneself for a suspected minor ailment, the real cause was more serious, and that time was being lost before effective therapy could begin. That has always been, to my mind, more than a mere theoretical risk. He claimed that the voluntary control of advertising as it affected home medicines could be said to work well, though there were exceptions. It seemed to me that Dr. Henderson was very much on the defensive so far as the advertised "patent" medicine was concerned. "Moves that would immediately channel all retail sales worth £65 million through chemists' shops and at one stroke deliver a distributive monopoly into the hands of an organisation (i.e. the Pharmaceutical Society) seeking to abolish advertising of these medicines might well arouse scepticism," he said. He did not make it clear who would be sceptical, but clearly such a situation would not be warmly acclaimed by the industry. The attitude of the Society is logical, and would be so even if it failed to secure the abolition of advertising. The limitation of distribution to pharmacists would at least present to the prospective purchaser the opportunity for skilled advice not available in the general store.

Protective Rôle

That was precisely Mr. J. P. Kerr's point when he referred to the protective rôle of the pharmacist. No matter what the codes of practice; the extent of voluntary control; the sophisticated scientific and medical techniques to which Dr. Henderson referred, the commodity is, to the manufacturer, by the very nature of the methods used to bring it to public notice, an article of commerce. To that extent its propagation is no more altruistic than was shown fifty years ago by the itinerant salesman in the market place. The purpose of it all, as Mr. Kerr stated, is to promote big business. And, as Dr. Henderson said, the proportion of society able to comprehend and evaluate for itself those medicines that could be bought without prescription was probably not much higher than in the previous generation. All the more reason, then, that that comprehension should be enlarged by the benefit of the knowledge and skill of someone trained and qualified in the subject. The pharmacist is not demanding a commercial distributive monopoly. All that he is asking is that the nation should recognise his value in giving advice to, and protecting, the public.

Vetting

Dr. Stuart Carne, the general practitioner who appeared as the third speaker at the session, asked if the chemist should be expected to "vet" the use his customers made of the pills he sold over the counter. Dr. Carne might be surprised at the incidence of "vetting" that does take place, even to the decision to refuse to stock the kind of preparations whose composition the pharmacist feels would make the sale difficult to reconcile with a live professional conscience. There are many occasions on which the prospective purchaser makes inquiry of the pharmacist as to his opinion on a particular preparation. That does not happen in the supermarket.

N.P.U. AREA MEETING AT TORQUAY

Latest on Training Levy

WAVING aloft a blue document, Mr. H. B. COULSON (chairman of the Pharmacy Assistants' Training Board) introduced at an area meeting of the National Pharmaceutical Union at Torquay, Devon, on May 11, the growingly important subject of training levies and grants. Copies of the paper, "Information Sheet 1 of the Distributive Industry Training Board," he said, might have been received during the previous few days by some of those present. Proprietor pharmacists who received it were not compelled to complete it, but it was probably to their advantage to do so. "It is more likely to get you out of the levy than to bring you in."

Objects of the Industrial Training Act, he summarised, were to make training available in industry that would open the way for every employee to secure the greatest advancement; to create a reservoir of skilled labour; spread the load of training expense; make the best use of man power; and enable workers to acquire new skills.

The mechanics of the Act enabled the Minister responsible to designate and define an industry and then to set up a Training Board. It had been laid down that pharmacy came under the Distributive Industry Training Board and the Board had power to impose on businesses in the industry a levy to cover its expenses and provide for the costs of approved training. All businesses must pay the levy, but only those whose employees received recognised training qualified for grants. The D.I.T.B. must raise its levy by August this year and was obviously straining every nerve to do so. It was naturally concentrating first on the larger firms, but he had it from Mr. Downing (secretary, P.A.T.B.) that the board was already approaching those down to ten-employee size. It would eventually reach those with only three. Beyond that point it might not be worth trying to collect the levy.

A Pharmacist Member

The Board was composed of nine employers, nine employees and six educational experts under the chairmanship of Mr. G. A. Spencer. Among them was one pharmacist (Mr. R. J. James, a director of N. Quenby, Ltd., Canvey Island, Essex, and a prominent member of the National Chamber of Trade). Mr. James had taken a keen interest in the pioneering work of the Pharmacy Assistants Training Board, and pharmacists were more fortunate than some other distributors in being uniquely able to provide qualified supervision for in-shop training, a fact that made correspondence courses a viable proposition.

The N.P.U. Executive was intensely in favour of staff training but hated the idea of members' paying money for nothing. Well before the Act had come into effect the Union had launched its staff-training scheme, which aimed to give instruction on many facets of operating a pharmacy, but also, and more importantly, to persuade assistants to seek to get themselves trained. The staff-training courses had been popular but would, of course, have to undergo frequent revision.

One of the effects of the abolition of Resale Price Maintenance had been to necessitate new standards of business management in pharmacies. The subject was included in some university courses in pharmacy, but more was needed. So the N.P.U.'s management seminars had been introduced. But there was now a move for more sophisticated management training, based on facts not currently accessible but which it was the Executive's intention to collect. All such activities would rank for training grants.

Assistants

For chemists' unqualified staffs there had been until recently no courses that ranked for grants. A committee under Mr. J. O. Bond had co-operated with the Company Chemists' Association and Co-operative Union in establishing the Pharmacy Assistants' Training Board, with observers from the Pharmaceutical Society, Guild of Public Pharmacists and Trades Unions. In collaboration with the City and Guilds of London Institute a new course would commence this year in the autumn, leading to a Dispensing Technicians Certificate (minimum age of entry sixteen; entrance condition three G.C.E. "O" levels, one in a scientific subject). The course was normally for three years, with some provision for exemption from the first (introductory science). The N.P.U. recognised that such courses could not be nation-wide. Hence the correspondence courses.

A second City and Guilds course that was nearly ready was for assistants and would lead to a modified certificate in retailing, with an elective subject, such as introductory science, for assistants from pharmacies. Progress of such assistants to the dispensing technicians' course by suitable persons would be facilitated. The strong hope was that the training arrangements would bring great benefit to pharmacy and its image.

Mr. E. J. DOWNING (secretary of the P.A.T.B.) dealt with the latest statement by the Distributive Industry Training Board. The levy was proposed to be set at 5 per cent. of the payroll. The smaller retailers (payroll less than £5,000) who could not benefit, would be excluded. In

pharmacy there was exemption for pharmacists to the extent that they were engaged in professional activities. There were in all thirteen grounds for claiming exemption, and "where the Board doesn't grant aid, it won't levy." A chemist could opt into the scheme if it paid him to do so. A record should be kept of expenditure on staff training.

Earlier the Union's chairman (Mr. JOHN REED, had introduced the Executive's revised statement of policy "Future Development of Retail Pharmacy." The new policy updates that published in 1967 (see *C. & D.*, October 21, 1967, p. 375). Since then, said Mr. Reed, there had been developments affecting retail pharmacy: the Dickson case, the enactment of the Medicines Bill, the spread of group medical practices, the building of new health centres and the further erosion of resale price maintenance. On the other hand there had been increased pressure from some members for a purely professional service excluding cosmetics, toiletries, photographic goods, etc.

The Executive believed the interests of the public would best be served if "traditional" retail pharmacies continued to operate profitably. The public should have reasonably convenient access to a retail pharmacy, dispensing and supplying medicines and providing the advisory service that would become increasingly needed by the public as access to doctors became more difficult through the formation of group practices and the introduction of appointment systems.

In areas in which the "traditional" types of pharmacy could not be viable it were better for the range of goods sold to be extended rather than for there to be no pharmaceutical service in the area. Sole criterion of suitability of goods sold should be that they did not conflict with the professional image of retail pharmacy.

A Basic Principle

The Executive Committee strongly supported the principle of restricting the sale of medicines to the public through pharmaceutical channels and would take every opportunity of advancing that principle. But the interests of N.P.U. members generally and, through them, of the public, were best served by seeking to ensure members could operate efficiently and profitably in present-day competitive conditions.

The four-fold policy of shop modernisation; management and staff training; N.P.U. products; and services to promote business efficiency would continue to form



Mr. H. B. Coulson

the basis for future action by the N.P.U.

The public must find pharmacy premises inviting to enter. Because it was considered important that pharmacies should continue to provide a service in the centres of towns and cities, it was recognised that other ranges of goods would have to be sold in the same building, or that another retail establishment might have to be associated with the pharmacy. Wherever possible, there should be a clear segregation of goods, the medicines being treated differently from the remainder of the stock. A pharmacist must be an expert in his chosen vocation and an expert retailer, and the N.P.U. Business Services Committee was developing management services enabling members to compete effectively in present-day circumstances. A corporate image must be created that private retail pharmacy offered value for money. The Executive proposed to introduce in the near future a consultancy service that would assist

members to achieve maximum profitability. To enable members to know whether their results were above or below average for their type and size of business, an interfirm comparisons scheme, designed to show typical results achieved by pharmacies in similar turnover groups, was being introduced. Comparisons would be examined under such headings as net profit, capital employed, stock-turn, sales per assistant, average net profit, and expenses and wages. The results would be interpreted by experts and practical advice given on the appropriate remedial action. This service would be provided again at nominal expense to members using it.

The Union's new marketing policy, only a week in full operation, was outlined by MR. J. O. BOND (a director of N.P.U. Marketing, Ltd.). "We must be strong and strong we are." Success in the new venture required that members should co-operate by paying accounts promptly,

by not overstocking, ordering in case lots, and not telephoning long orders (they should be sent by post). Salesmen would call on all members, but between journeys they should place orders direct. MR. H. C. WATKINS (chief marketing executive) highlighted particular points in the scheme: its 158 items of merchandise; score of depôts; 48-hour delivery service; and own sales force. Never, he said, would any N.P.U. product be marketed without meeting quality and value criteria. In answer to members' questions, he said each distributor had undertaken to accept only N.P.U. members as purchasers of N.P.U.M. products and that processing of Nu-films would eventually be at depôts throughout the country. MR. J. WRIGHT (managing director of N.P.U.M., Ltd.) said that for each product a specification was laid down and a quality control officer had been appointed to see that the required standards were maintained.

Poor Turnout for Council Candidates

FEWER than two dozen voters turned out to hear the policies of ten candidates in the Pharmaceutical Society Council elections when they presented themselves for open questioning in London on May 7. The "face-to-face" was organised by the Greater London Pharmaceutical Association which, through its constituent branches, has a membership of around 4,000. The candidates who attended were Messrs. A. Aldington and F. Battersby, Professor A. H. Beckett, Messrs. J. C. Bloomfield and J. P. Kerr, Mrs. E. Lucas-Smith, Mr. M. Millward, Mrs. R. G. Porter, and Messrs. A. D. Vaughan and I. H. Williams.

A main topic in many of the five-minute introductory speeches was the then recently taken decision on rural dispensing and MR. BATTERSBY offered himself as one who had personally suffered from dispensing doctors. He was not impressed by the Council's record, and thought it about time a rural pharmacist was on Council. MR. KERR (a retiring member) replied that Council had just decided its policy for fighting the decision, and that it would be seen in action in the next few weeks. MRS. LUCAS-SMITH said the problem would be solved only when doctors no longer got better pay and pensions through dispensing.

Never far from the surface at the meeting was antagonism between Chemists' Action Group candidates and retiring Council members. To a man the C.A.G. sought "a more positive attitude" from the Council—in MR. WILLIAM'S words "More cheek and less offering of the other cheek." MR. MILLWARD said the C.A.G.'s plans were based on the N.H.S. contract as being fundamental to pharmacy, and MRS. PORTER added that it would be put in the hands of pharmacists as a means of achieving unity in the profession. Challenged to name some of the actions the C.A.G. proposed, she said that they had "lots," including withdrawal of

inspectors, selective strike action and mass lobbying of M.P.'s.

MR. ALDINGTON was one who emphasised the need for a planned pharmaceutical service and the Council's work in that direction. He believed that, in public relations, the Council had achieved a measure of success, but asked "How do we convince our own members that they ought to be their own public-relations officers?" MR. BATTERSBY said there should be Press publicity to spell out what pharmacy was, perhaps after starting a fighting fund—"This is how to get at the members—by hitting them in the pocket." PROFESSOR BECKETT defined the pharmacist's rôle as to protect the public and to act as a bridge between it and the medical profession. In the past the training had perhaps not been sufficient to justify the pharmacist in any claims to be the expert in drugs, but degree entry had now given a platform from which the profession could negotiate with more certainty. The key was hospital pharmacy. Twenty Ph.D's in teaching hospitals would ensure that the doctor understood the importance of the pharmacist.

MR. BLOOMFIELD, as a retiring member, listed some of the Council's achievements and claimed as a great step forward the statement on amphetamine sulphate powder. For the first time the Council had issued advice not to dispense certain properly written prescriptions—even when knowing that the pharmacist might be in breach of his N.H.S. contract. MR. KERR referred to the special meeting that was being called by Mr. Millward and others on counter prescribing. The Medicines Act, he said, legalised the pharmacist's position on the subject but gave the public the safeguard that the pharmacists must see the patient he wished to treat individually, rather than prescribing for him a licensed product for which the claims had been accepted. MR. VAUGHAN said that the Council had been unable to prevent some medicines from being sold otherwise than

from pharmacies on grounds that the convenience of the public must be paramount. The C.A.G. believed it was the safety of the public that must be paramount. It had been argued that a young inexperienced girl could sell medicines in a pharmacy; pharmacists should make enough from N.H.S. and sales of medicines to employ staff of a higher calibre.

Much of the evening's questioning came from MR. R. JACKSON, who expressed the opinion that C.A.G. candidates had one thing in common—lack of experience. His criticism that they should act through the branches was rebutted by MR. BATTERSBY, who said he was secretary of Cambridge branch. MR. MILLWARD'S aim was to have the Council involved as the contract negotiating body when there were no commercial considerations. Drug costs were irrelevant: it was no more professional to supply one drug than another. If the Ministry wanted to argue over prices with the industry "that is not our fight." MR. KERR, on the other hand, claimed it was the contract that was irrelevant as a platform for the Council election. The matter should be taken through Pharmaceutical Committees.



TRANSATLANTIC FLIER: Miss Vivienne Eldridge, a joint competitor in the *Daily Mail* Transatlantic air race, receives from Mr. Ray Tredwen (Kodak, Ltd., the company that sponsored her trip) an Instamatic 133 outfit. Her group gained a one-third (£1,750) share of the £5,000 prize for the most meritorious non-winning entry.

IN PARLIAMENT

AN invitation to initiate through the National Health Service an inquiry into the adverse effects of oral contraception was declined by MR. R. CROSSMAN (Secretary for Social Services) on May 12. He was answering questions put by MISS J. LESTOR who said that statements by people in authority on the causal connection between, for instance, thrombosis and the pill and cancer and the pill, were causing concern among many women.

MR. E. BROOKS: Will you not agree that certain irresponsible allegations have recently been made in coroners' courts which have caused unnecessary anxiety to many women and quite gratuitous offence to the pharmaceutical industry?

MR. CROSSMAN: There is something in what you say. The Committee on Safety of Drugs has carefully considered all the evidence and has decided that, despite the evidence of adverse reactions to oral contraceptives, they should still be on sale. I absolutely trust the Committee on Safety of Drugs. If there had been the vaguest doubt, the Committee would not have said that.

Medicines Commission

MR. L. PAVITT asked the Secretary of Social Services if he would announce the names of the persons he proposed to appoint on the Medicines Commission; and when the first meeting would be held. MR. CROSSMAN replied that a further statement must await the completion of consultations.

Gifts to Students

MR. L. PAVITT asked the Secretary for Social Services if he would take steps to prevent pharmaceutical companies making gifts to medical students in their final year.

MR. CROSSMAN: I am not aware that pharmaceutical companies in this country make such gifts to any significant extent. I will gladly consider any evidence you may have.

Proprietary Equivalents

MR. B. WHITTAKER asked the Secretary for Social Services his estimate of the annual cost to the N.H.S. of proprietary brand drugs being prescribed instead of their non-proprietary equivalents; and the annual cost to the N.H.S. of proprietary equivalents being prescribed instead of paracetamol.

MR. CROSSMAN said exact equivalence was rarely demonstrable, but he estimated that use of non-proprietary products instead of proprietaries with the same amounts of the same active ingredients would save about £1.4m. a year, including about £130,000 for paracetamol.

Pharmaceuticals: Price Reductions

MR. L. PAVITT asked Mr. Crossman on May 13 when the negotiations with "Company A" providing the N.H.S. with pharmaceutical products announced in paragraph 27 of the Report on Civil Appropriation Accounts 1966-67 (see C. & D., February 10, 1968, p. 117), were

completed and what was the estimated saving of money which resulted.

Mr. Crossman replied that negotiations had been concluded on April 25. The company was to make price reductions and other adjustments with an estimated saving in the next year of approximately £1 million.

Points from Parliamentary Replies

THE Government's view is that it is neither desirable nor practicable to impose a "universal origin-marking requirement on imported goods."

THERE is no present intention to introduce further controls on the addition of antibiotics and hormones to animal feeding-stuffs.

SPECIFIC requirements as to size of lettering on food labels are being replaced with general provisions requiring the name or designation to be shown prominently and conspicuously and without undue emphasis on minor ingredients.

LEGAL REPORTS

Beverage Not Medicine

RIBENA blackcurrant juice is a manufactured beverage, not a drug or medicine, Mr. Justice Ungood-Thomas ruled in the High Court on May 9. The manufacturers, Beecham Foods, brought the test action (see C. & D., April 26, p. 358), because, if the judge had ruled in their favour, blackcurrant juice would have been exempted from purchase tax. The decision means that the juice continues to attract purchase tax which, when it became chargeable, was at the rate of 15 per cent. and is now 22 per cent.

Tried to sell back hired films

HITCHIN, Herts, magistrates were told recently of a customer who had hired cine films from a chemist, failed to return them, and some time later asked the chemist if he was interested in buying the films. Edward Swain, Hitchin, pleaded guilty to obtaining eight films by deception from Mr. George Cripps, Sun Street, Hitchin. He asked that five similar offences should be considered. A police officer said that Swain had gone to other chemists in the area and, using false names and addresses hired more films. During March he had telephoned asking Mr. Cripps if he was interested in buying some films. Swain had asked a friend to take the films and sell them. The films were recognised and the police informed. Swain was remanded on bail for four weeks for medical and psychiatric reports.

Poisons By Post

THE Pharmaceutical Society of Great Britain was ordered by the Inner London Sessions Appeals Committee to pay £220 costs to Nethercott (Chemists), Ltd. Trading at 98 Streatham High Road, under the name of R. Westbury Chemists. The company appealed against two convictions and fines that had been imposed at the Wells Street court. The company had been fined

£50 for selling to Joseph Reginald Dale a poison otherwise than under the supervision of a registered pharmacist, and a further £50 and £25 costs for a similar offence of selling a poison to Brynley John David. The proceedings had been brought under Section 18 (1) (a) (iii) of the Pharmacy and Poisons Act, 1933. Counsel for the Pharmaceutical Society said that the substance alleged to have been sold was contained in what was known as KH3 tablets, which contained minute quantities of the scheduled poison procaine hydrochloride. The pills were known as the "youth" pill and it was felt that these might get into wrong hands of young people who really needed medical treatment. They had been advertised, and two test purchases had been made by post by representatives of the Pharmaceutical Society. There was now evidence, and evidence which he did not challenge, that in fact the items were supervised by a registered pharmacist, and the 1933 Act did not include postal sales. In the circumstances, the Pharmaceutical Society no longer had any desire to support the convictions, and on their behalf he would offer no evidence. Counsel for the company said there was no evidence of public danger. The pills were manufactured in Germany and there had been a great publicity campaign concerning them in this country. The company had been put to considerable expense in contesting the matters and in the circumstances he asked for costs to be awarded to them. The chairman of the Appeals Committee said that the two convictions and penalties would have to be quashed. The Committee had had a lengthy retirement to consider the question of costs, and had decided to award the firm 200 gns. "We think this is just and reasonable in the circumstances."

COMPANY NEWS

Previous year's figures in parentheses

DUNBEE-COMBEX-MARX, LTD. — Pre-tax profits for 1968, £387,110 (£252,520). Dividend is 54 per cent. (50 per cent). Profits include those of H. A. Spears & Co., Ltd., acquired in July, 1968.

TAKEDA CHEMICAL INDUSTRIES, LTD. — For the half year ended March 31, the trading results in millions of Yen were: sales, 59,509 (against 68,550 in the same period of 1967); pre-tax earnings, 7,682 (9,421), tax, 3,800 (4,700).

ASHE CHEMICALS, LTD. — A final dividend of 12.85 per cent. is recommended on the Ordinary Share Capital of £49,569, making 24.85 per cent. The directors also propose a one-for-three scrip issue. Group net profit, before taxation was £478,080 (£391,634); taxation, £200,212 (£145,361) and group net profit, after tax, £277,868 (£242,981).

UNICHEM, LTD. — Group profits, before tax, in the fifty-three weeks ended January 5 rose to £60,483 from £36,300 in the previous year. The increase was all the more notable since it was after absorbing higher levels of bank interest, depreciation charges and selective employment tax and also the cost of a special survey into the company's affairs. After tax the profit was £29,599 (£21,116). A dividend of 5.175 per cent. is being recommended.

BUSINESS CHANGES

RANK FILM LIBRARY are moving on May 19 to P.O. Box 70, Great West Road, Brentford, Middlesex (telephone: 01-568 9222).

M. & R. NORTON, LTD., with their associate companies, Cavalcade Beauty Preparations, Ltd., and Marcel Franck & Co. (London), Ltd., are removing on June 25 to Adriant Works, 155 Merton Road, London, S.W.18 (telephone 01-874 6087).

APPOINTMENTS

Board

MR. T. C. BLACK, M.P.S., former joint managing director, Miles Laboratories,



Ltd., Stoke Poges, Bucks, has been elected vice-president of Miles Laboratories, Inc., Elkhart, Indiana, U.S.A. Mr. Black will direct the operations of the eleven general managers who are in charge of Miles activities in thirty-five countries. He

joined the Miles organisation in 1959 as general manager, Ames Co. Before moving to Elkhart in 1967 Mr. Black, in addition to being joint managing director of Miles Laboratories, Ltd., was commercial director, Ames Co., Europe.

DEATHS

ADAMS.—Recently, Mr. Fred Adams, M.P.S., 6 Buxton Road, Castle Gresley, Burton-on-Trent. Mr. Adams was manager of the St. James's Street branch Derby, of Boots, Ltd., for twenty-eight years and was previously at Lincoln. Mr. Adams qualified in 1934.

JAMIESON.—On May 7, Mr. William Nisbet Jamieson, M.P.S., Glenmarlin, Greenlaw Road, Newton Mearns, Glasgow. Mr. Jamieson qualified in 1934.

MARTIN.—Recently, Mr. Philip J. Martin (senior medical representative in the Republic of Ireland of Bayer Products Co., Ltd.), Dean's Grange, Dublin. A native of Dundalk, Mr. Martin had been with the company since 1941.

EXPANSION PROJECTS

ANOTHER antibiotics factory is to be built by Glaxo Laboratories, Ltd., this time on a site of over 100 acres at Cambois on the coast of Northumberland. The first phase of development is likely to involve investment of about £5 million and production is anticipated in early 1971.

THE Astra group inaugurated on April 1 a new factory in Mexico for production of pharmaceutical products. The factory is an extension of the former plant and will engage about 100 employees during 1969. The Swedish group sells slightly more than 40 per cent. of its output of pharmaceuticals abroad and has thirteen subsidiaries outside Scandinavia.

SCOTTISH DEPARTMENT

Candidates for election to the Executive

C. R. BLYTHE, Douglas.—Registered 1953. National Service in Royal Navy. Been manager of a multiple pharmacy and nine years a medical representative. Now proprietor of a rural pharmacy in Douglas, Lanarkshire.

J. C. CHILTON, F.P.S., Glasgow.—Registered 1946. Senior lecturer, department of pharmaceutical technology, University of Strathclyde. A member of the Executive since 1966. A member, audio-visual aids subcommittee of the Society; secretary and treasurer, Glasgow and West of Scotland Branch.

T. HARE, Edinburgh.—Registered 1951. A medical representative. A committee member, Edinburgh and South-eastern Scottish Branch.

G. B. KIRKWOOD, Glasgow.—Registered 1956. Pharmacy manager. Secretary, City of Glasgow Local Pharmaceutical Committee since 1965.

J. MACLAREN, Auchinleck.—Registered 1929. Director of a private company in general practice. A member of the Executive since 1962. A member, agricultural and veterinary subcommittee of the Society. A past chairman, Ayrshire Branch. Serves on Ayrshire Executive Council.

J. M. NEIL, Edinburgh.—Registered 1957. Group pharmacist, Edinburgh Northern Hospitals and chief pharmacist, Western General Hospital, Edinburgh. A member

south-eastern Regional Hospital Board Pharmaceutical Advisory Committee.

A. ROXBURGH, Prestwick.—Registered 1935. After ten years in general practice entered hospital pharmacy. Now group chief pharmacist, Glasgow Royal Infirmary and associated hospitals. Chairman of the Executive and a member since 1960. A member, Noel Hall Working Party on Hospital Pharmaceutical Service. Committee member, Ayrshire Branch.

M. TAYLOR, Lairg.—Registered 1956. After four years' experience in England now manages a pharmacy in Lairg, Sutherland. A member, Local Pharmaceutical Committee since 1961, secretary since 1967. A member, Sutherland Executive Council since 1961. Pharmaceutical General Council (Scotland).

D. C. C. WALLACE, Dundee.—Registered 1938. Proprietor pharmacist. Secretary and treasurer, Dundee and East of Scotland Branch since 1950. A member of council, Scottish Pharmaceutical Federation since 1955. Secretary, Dundee Retail Pharmacists' Association 1954-62.

S. WOZNIAK, F.P.S., Dunfermline.—Registered 1949. Group chief pharmacist, Milesmark Hospital, Dunfermline. A member of committee, Fife Branch. Chairman, Edinburgh and East of Scotland Branch, Guild of Public Pharmacists.

TRADE NOTES

Now Purchase Tax Free

ANUGESIC HC cream and suppositories are exempt purchase tax from May 15 state the makers, William R. Warner & Co., Ltd., Eastleigh, Hants.

Available as Capsules

ZYMA (United Kingdom), Ltd., Catteshall Lane, Godalming, Surrey, announce that their speciality Paroven is now available as capsules in bottles of twenty and 100; the tablets continue available.

Price Correction

SUPERWINE Spanish grape-fruit concentrate of Continental Wine Experts, Ltd., North Walsham, Norfolk, is priced at 15s. and not as previously stated.

From the Makers

DISTRIBUTION of Total Beauty aerosol hair remover is currently being undertaken by the manufacturers, Total Beauty, Ltd., 89a High Road, Wood Green, London, N.22, and not as previously announced. The product is being test marketed in the Southern television area and a "spot" was due to appear on May 14. A further statement on distribution arrangements is expected at the end of May.

Bigger Pack at Same Price

TUBE of Inecto colour creme permanent cream colouring in eighteen shades by Rapidol, Ltd., 27 Dover Street, London, W.1, has been increased from $\frac{3}{4}$ -oz to 1-oz size; the "B" bottle solution is proportionately increased. The larger carton has been given more "eye appeal" and now incorporates a simple colour selection chart. For the time being the makers have taken a decision not to lift the prices. A

comprehensive hair colour shade selector is available either through company's representatives or direct from head office.

Bonus Offers

GILES FARNABY OF LONDON, LTD., 143 New Bond Street, London, W.1. Beaux' Stratagem Cologne. Thirteen invoiced as twelve. In return for display.

H. J. HEINZ CO., LTD., Hayes Park, Hayes, Middlesex. Strained egg and bacon breakfast, junior egg custard with tapioca. Extra 5 per cent. May 26 to June 21.

NAPPI-WITE, LTD., 34 South Molton Street, London, W.1. Nappi-wite. Twelve invoiced as eleven. Till July 31.

Whitsun Closings

MOST manufacturers and wholesalers are closing at their normal closing time May 23 and reopening at normal time May 27.

The following special arrangements should be noted:—

BEECHAM ETHICAL DISTRIBUTORS, Great West Road, Brentford, Middlesex. B.E.D. telephone answering service (01-560 2876) for orders for products of Beecham Research Laboratories and Bencard, to be processed immediately office reopens.

NORTHERN PHARMACEUTICALS, LTD., Galen House, Grattan Road, Bradford 1. Saturday, May 24, open 8.30 a.m. to 12 noon. May 26, closed all day. May 27, open 10 a.m. to 12 noon.

WILLIAM RANSOM & SON, LTD., Hitchin, Herts. Offices and works closed May 26-30, inclusive.

Competitions

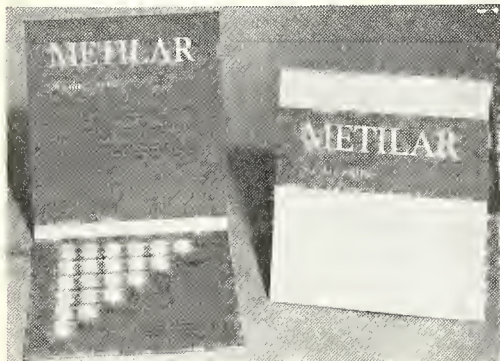
GILES FARNABY OF LONDON, LTD., 143 New Bond Street, London, W.1. Prize in contest to find male model for Beaux' Stratagem products is a full course of training at London Academy of Modelling. Contestants must send portraits and say in not more than twenty words, why they could be the successful model.

New Products and Packs

PHARMACEUTICAL SPECIALITIES

Purpose-designed Pack

FROM Syntex Pharmaceuticals, Ltd., St. Ives House, St. Ives Road, Maidenhead, Berks, is now available a new purpose-



designed pack of Metilar tablets. It contains twenty-one tablets for a "tapered" short course of treatment (beginning with six tablets on the first day and finishing with one tablet on the sixth). The Metilar form of corticosteroid therapy is claimed useful in acute episodes of asthma or acute eczematous dermatitis. Hitherto, however, the product has been complicated to prescribe and dispense on account of the detailed instructions needed.

A New Tablet in Range

IN the range of economy brands offered by Berk Pharmaceuticals, Ltd., Cotteshall Lane, Godalming, Surrey, is now included Auriquin (quinidine sulphate tablets B.P.) in packs of 100 and 500 200-mg and 300-mg strengths.

A New Urine-test Strip

UROBILISTIX, a new strip test for urobilinogen in urine (12s. 6d. for bottle of fifty), is introduced by Ames Co. (division of Miles Laboratories, Ltd.), Stoke Poges, Bucks. Main applications of the strip are as a liver function test and as an aid in following the progress of patients with infectious and serum hepatitis by serial testing. Urobilistix are firm plastic strips with reagent system attached, the reagents being integrated into an absorbent area at the tip of the strip. Result is shown in 60 seconds. The active reagent *p*-dimethylamino-benzaldehyde is stabilised in an acid buffer.

Steroid-analgesic Foam

FOR use in haemorrhoids and other anorectal disorders, Stafford-Miller, Ltd., 166 Great North Road, Hatfield, Herts, have introduced Proctofoam HC which, they claim, "supersedes suppositories for anorectal therapy." The product is an aerosol presentation of a steroid (hydrocortisone acetate 1 per cent.) and an analgesic (pramoxine hydrochloride 1 per cent.) in a mucus-adherent base. Each metered dose of medication is delivered from the aerosol to a special applicator in which it foams up to a consistency well

suited to the therapy. Because it covers the entire anorectal mucosa the product affords long-lasting relief at a lower steroid dosage, and by a "no-touch" method of administration. Cost per dose is understood to be lower than of steroid-containing suppositories. The pack holds 24 g (approximately fifty applications).

OVER-THE-COUNTER MEDICINALS

Ready-to-use Mouth Rinse

AN attractively packed new product, Doran mouth rinse and gargle (4s. 6d.) has been launched by Laboratories for Applied Biology, Ltd., 91 Amhurst Park, London, N.16. It was produced to meet a demand for a ready-to-use mouth rinse, and it has the advantage of avoiding the cautionary labelling requirement of the concentrated Doran mouthwash.

Now a Retail Pack

THE speciality Thovaline of Ilon Laboratories (Hamilton), Ltd., Lorne Street, Hamilton, Lanarks, is now being offered for sale to the public without the need for a prescription. For fifteen years, say



Messrs. Ilon, the product has enjoyed excellent sales to many hospitals, doctors and (by prescription) through pharmacists. The makers have decided that there is now a potentially more favourable retail market for the product than has existed in the past and are accordingly presenting a retail 30-g unit (3s. 6d.) in display pack of twenty-four. Also available is a twelve-unit pack.

PRODUCTS FOR BABY

Four Added to Series

THREE new products in the Natusol series marketed in the United Kingdom by Thomas Kerfoot & Co., Ltd., Vale of Bardsley, Ashton-under-Lyne, Lancs, are a baby powder in pack of 85 g (3s. 9d.), a 100-g soap (2s. 9d.), a 190-g lotion (7s. 6d.) and a 100-ml shampoo (5s. 9d.).

COSMETICS AND TOILETRIES

Balsam Hair Conditioner

NEW Wella Balsam (12s. 10d.) from Wella (Gt. Britain), Ltd., Wella Road, Basingstoke, Hants, is described as "a

conditioner with a difference." It comes in an aerosol spray, making it quick and easy to apply. Only a little is required to make the hair shine. It does not make the hair greasy and "tames unruly or fly-away hair."

Eyelash Pomade Applicator

THE eyelash pomade of Harriet Hubbard Ayer, Colwick Industrial Estate, Nottingham, is now easier, quicker and more pleasant to use by being in an automatic applicator (27s. 6d.) with spiral brush that allows the pomade to be rolled on smoothly and evenly. The gentle massage action of the applicator is claimed also to stimulate the growth of the lashes.

With "Just Enough Colour"

NATURE Tint (9s. 11d.) is a new Mary Quant transparent make-up tint distributed by Myram Picker, Ltd., Hook Rise, Surbiton, Surrey. It is designed to give an even, all-over skin colour and is "so light you hardly know it's on." Companion lines are four new see-through lip-slickers (9s. 11d. each) and four new nail polishes (5s. 11d. each).

Creme Perfumes

A NEW creme perfume introduced by Max Factor, Hollywood and London (Sales) Ltd., 16 Old Bond Street, London, W.1, (15s. 6d.), is described as "a luxurious formulation of memorable perfume blended with a rich, quick-absorbing cream that smooths into the skin, creating a cloud of complete fascination." The product has been created to be applied at



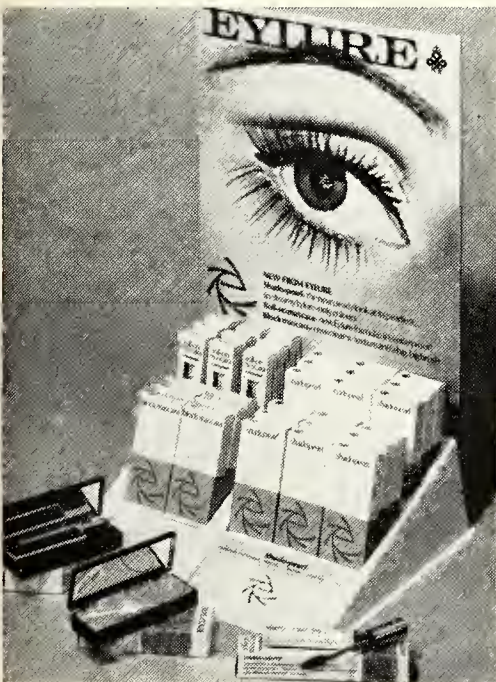
the "pulse points," where natural body warmth allows the fragrance to emerge "making it come alive and stimulating, captivating and appealing." The product is available in *Exuberance*, *Hypnotique* and *Primitif* fragrances and the delicate round container is colour-keyed to the familiar Max Factor perfume packaging (orange-gold for *Exuberance*, yellow for *Hypnotique* and red for *Primitif*).



LOTION AS WELL AS CREAM: Canister of new Veet "O" lotion (see C. & D., May 3, p. 388) shown with cartoned tube of the long established cream in 3-D displaypiece obtainable from the manufacturers, Dae Health Laboratories, Ltd., 17 Berners Street, London, W.1.

Three New "Eye Makers"

NEW Shadopearls (12s. 6d.) from Eylure Ltd., 8 Grosvenor Street, London, W.1, are "just six pretty eye colours with more than their fair share of pearl to add sheen to the shadow." They come in mock tortoiseshell compact with mirror and special applicator and in six shades to choose from (white, blue and green haze, wild



lilac, golden sand and pink champagne). Two new mascara packs are a block mascara (8s. 6d.) in black or brown, and also in mock tortoiseshell compact with own mirror and "double-thick" brush; and a roll-on and creamy, waterproof mascara (10s. 6d.) in white-and-gold case with "super brushy applicator" that screws in to the case.

Disposability-Plus

A Chukka range of disposable ladies' panties in white, pink and blue (2s. 3d. for three) has been launched by LR Industries, Ltd., 8 Chingford Mount Road, London, E.4. Chukka panties are manufactured from a non-woven fibre material (80 per cent. rayon) that produces a garment of remarkable strength. The panties, in bikini brief style, fit all sizes up to



38-in. hip. Their introduction coincides with the rapid growth of disposable clothing requirements in Great Britain. Their obvious advantages are convenience (no laundry bills), freshness, hygiene and easy disposability.

Disposable Panties

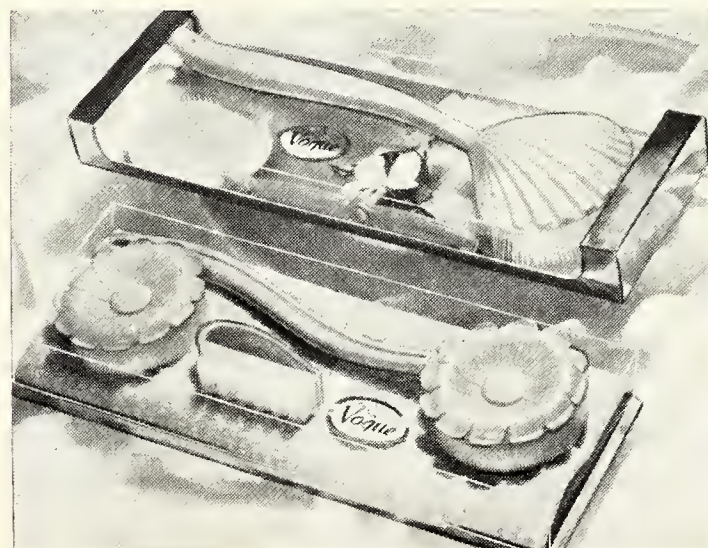
FIRST of a range of disposable articles to be produced by Sandcrest, Ltd., 307 Finchley Road, London, N.W.3, is Nix, which is expected by the manufacturers to capture a large share of the British summer holiday market during the coming weeks. For the first time a real attempt is being made to persuade users of the ease and economy of effort effected by wearing disposable panties, whether under tights or on their own. The double fabric used, and the careful positioning



of the elastic on the legs, ensure that Nix fit snugly without cutting into the flesh or making ugly bulges. Currently available in white, blue and pink, they will be available in further styles and colours later this year. Other new products (samples already available) include aprons, babies' bibs and hairdressing gowns, some of them in the basic disposable fabric in varying strengths, others in PVC coated designs.



PACK AIDS DEMONSTRATIONS: Designed primarily to achieve maximum consumer impact and to give ease of handling instore, a new card pack for the Gillette Techmatic safety razor is printed in the product colours (red and black) and has a tray holding the razor—incorporated specifically to aid retailers in demonstrating the product without first having to "unpack" the razor. Simultaneously with the restyling, Gillette Industries, Ltd., Great West Road, Isleworth, Middlesex, have produced a compact merchandiser holding six razors.



BATH SETS AS GIFTS

Shown are new bath sets from the 1969 gift range of Laughton & Sons, Ltd., Warstock Road, Birmingham, 14. The one above, No. 2719 (15s. 11d.) is in gold "window" box and contains massage pad, bath brush, manicure brush and stocking dryer. Below is sealed transparent pack, No. 2724 (32s. 6d.), containing brush, nail brush and hand towel.

REGIONAL AND LOCAL

SHEFFIELD

Joint Professional Lecture

382 people attended the annual "joint professions lecture" held by the local organisations of the pharmaceutical, medical, dental and optical professions in Sheffield. Speaker this year was ex-Detective Superintendent Malcolm Fewtrell who was head of the Buckinghamshire C.I.D. during the investigation of the Great Train Robbery, and who described the work on that case.

CHELTENHAM

Pharmacists' First Duty

A PHARMACIST'S first duty was to try and contain the drug menace, members of the Cheltenham Branch of the Pharmaceutical Society were told at their recent annual dinner in Cheltenham. Speaker was Mr. D. E. SPARSHOTT (a member of Council), who also commented on the introduction of the metric system into prescribing. There was, he said, a need for a closer consultation between chemists and doctors on the subject. Mr. Sparshott thanked the Branch for its contribution of £150 for the Society's Benevolent Fund. A cheque for that amount had earlier been presented by the wife of the Branch chairman, Mrs. E. Gilliland.

REIGATE AND REDHILL

Medical Spearhead

WITH the coming into operation of the Medicines Act, 1968, the pharmacist would in effect become a "first-time" medical spearhead. That was how Mr. K. A. LEES (a member of Council) saw the pharmacist's future when he responded to the toast "The Society and Guests" at the annual dinner of Reigate and Redhill Branch of the Pharmaceutical Society, recently. Pharmacists would, he said, effectively prevent misuse of the remainder of the health service by screening off the many patients for whom symptomatic treatment would suffice. The retail chemist was also in the "spearhead" of the fight against drug addiction.

LIVERPOOL

Moving Closer

MOVES were afoot to create closer contact with the Birkenhead Branch of the Pharmaceutical Society during the coming session, reported secretary Mr. A. E. Hunter at the annual meetings of Liverpool Chemists' Association and Branch of the Society on April 24. Branch membership was now 518, said Mr. Hunter. Attendance at meetings in 1968-69 was 478, compared with 678 in 1967-68. The drop might have been caused by lack of a technical meeting, also, this year, no open meeting had been held. "In February I organised the first meeting of the Merseyside and North Wales regional committee in Chester." Dr. W. Marlow, of the Liverpool School of Pharmacy became *Chairman* and Mr. Hunter *Vice-chairman*. Mr. N. H. Booth, of the School of Pharmacy was regional careers officer, and the British Pharmaceutical Students' Association

was represented by Mr. P. Molyneux. Mrs. E. J. M. Leigh was a member of the committee by virtue of her being a member of the Society's council. It was agreed that members be circularised inviting donations to the C. S. Cullen fund for the purchase of something for Birdsgrove House. Mr. Cullen who had recently died had for many years organised the Association's Benevolent Fund dance.

THAMES VALLEY

Annual Meeting

AVERAGE attendance at meetings of the Thames Valley Pharmacists' Association during the past year was forty-nine out of a total of 468 members. That information was given by the secretary (Mr. F. H. Burton) at the Association's annual meeting on April 24. The retiring president (Mr. F. C. Wilson) invested his successor, Mr. D. V. Smith, with the chain of office. Mr. T. James, a past president of the Association tendered his resignation from the committee to make room for a younger member, and Mr. J. A. Plenderleith, also a past president, resigned on account of his forthcoming departure from the area. Both were warmly thanked from the chair for their services to the Association.

BRIGHTON & HOVE

Dame Flora Entertains

RACY reminiscences by Dame Flora Robson delighted diners at the annual dinner of Brighton & Hove Association of Pharmacy and Branch of the Pharmaceutical Society held at Lewes on April 30. Dame Flora was responding to the toast "Our Guests," proposed by Miss L. L. Peck (Association president). Dame Flora's anecdotes ranged from a pharmacist who cured warts by hypnotism and another who had confessed that his main preoccupation was the birds on Brighton front. Mr. J. Rendal Jones (chief education officer, East Sussex County Council) proposing "The Pharmaceutical Society," congratulated pharmacy on the development and advancement of its educational policies since its foundation in 1841, and for unceasing vigilance in the control and distribution of drugs. Mr. J. C. Bloomfield (a member of the Society's Council) replied.

EDINBURGH

"Pharmacy Charter" Needed

THE Pharmaceutical Society was called upon to initiate a "pharmacy charter" by Mr. F. HEPBURN (chairman) at the annual meeting of Edinburgh Local Pharmaceutical Committee electors recently. In his introductory remarks at the meeting, which took the form of an "any questions," Mr. Hepburn said that the first breakthrough in National Health Service remuneration took place at the beginning of the service when the terms were a distinct improvement on those under National Health Insurance. The second was the beginning of remuneration surveys. Another breakthrough was now necessary and that could best be achieved by a "pharmacy charter" drawn up by

all the representative bodies concerned. The "charter" would bring out the exacting duties the pharmacist had to perform; his service to the community; the vital part he was playing in the N.H.S. and the rewards he should reasonably expect from that service. The Pharmaceutical Society should initiate such a charter without delay as it would take some time before it could be presented in its final form.

SUNDERLAND

Drug-protein Interactions

RECENT developments in drug-protein interactions were reviewed by PROFESSOR J. B. STENLAKE (professor of pharmaceutical chemistry, University of Strathclyde) at Sunderland, recently. Professor Stenlake was presenting the Höpe C. M. Winch Memorial lecture at Sunderland Polytechnic's school of pharmacy. Work done by various research groups since 1953 had led to modern theories of molecular perturbation and allosteric control mechanisms. Professor Stenlake pointed out that for every centre of action in the protein there was an adsorption equilibrium between the amount of bound and unbound drug. The process could be described in terms of an equation showing that as the total concentration of drug increased, the proportion of bound drug decreased. The binding forces involved were thought to be mainly of electrostatic origin if the drug itself was acidic or basic, and of the hydrogen bond and van der Waals type if the drug molecules were neutral or contained large hydrophobic groups. Solubility of various drugs increased in plasma protein solutions where binding to the albumin fractions was found to be of particular significance. The effects of temperature and increasing alkyl chain length of certain drugs were also discussed. Dealing with the problem of the displacement of bound drugs caused by the addition to the blood stream of other compounds such as fatty acids, either by deliberate addition or physiological stimuli, Professor Stenlake said that recent work based on clinical trials from the University of Strathclyde had not substantiated work by an American group performed on rats, which suggested that acid antirheumatic drugs such as aspirin and butazone acted by displacing previously protein-bound hydrocortisone. Professor Stenlake said that a technique recently developed in his department based on Sephadex gel filtration gave results in good agreement with those obtained from equilibrium dialysis studies. Finally, after answering questions, he presented to Mrs. B. H. Davdani the Höpe C. M. Winch Memorial scholarship for the most outstanding student of the 1968 session. Proposing a vote of thanks to Professor Stenlake, Mr. F. H. Oliver said that the lecture was the first of a new series in which it was hoped to present recent academic advances in pharmacy. Before the lecture he had accepted a gift of reference books for the use of students in the school's laboratories presented by members of the Durham County, Northumbrian, Tees-side and Sunderland Branches of the Pharmaceutical Society.



CHEMIST AND DRUGGIST

For Retailer, Wholesaler and Manufacturer

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Medicine or Grocery?

THE recent decision in the Ribena case (see p. 430) is of importance to pharmacists in general practice. The judge (Mr. Justice Ungood-Thomas) refused to declare that Ribena was a drug or a medicine, observing in his judgment that the maker's advertising emphasised the maintenance and improvement of health and was thus clearly aimed at the healthy person. A significant factor influencing the judge's decision may have been that five-sixths of the supplies of the product were sold through grocers.

Thus valuable guidance may prove to have been laid down, namely that, if a particular class of goods is to be regarded, for purchase tax or for any other purpose, as a medicine, then the method of its retail distribution to the public should be by way of the pharmacy. That principle, once established, would put an end to the practice whereby, in the past, pharmacists have assisted in promoting the sales of a product only to find, once it has become known to the general public, that its distribution had been widened to grocers and others. It is logical to expect a manufacturer, if he wishes to promote his product as a medicine, to organise the bulk of its sales through pharmacies.

Had the Londoners All Voted?

LESS than a fortnight after the Secretary of State's shock decision on rural area dispensing, London voters in the Pharmaceutical Society's Council election were in the privileged position of being able to put some of pharmacy's would-be representatives "on the spot." Yet a mere two dozen from a potential 4,000 thought the journey to Bloomsbury Square worth while. Had the rest already voted—or were they not interested? The question of rural areas was touched upon by most of the candidates, and retiring Council members were able to report that decisions on action had been taken at that day's Council meeting. How much more effective that action would be if it could be shown just how strongly the profession feels.

The Council has had an important series of tasks to undertake and the work is going to continue during 1969-70. Negotiations in respect of the Medicines Act regulations are likely to be hard if vested interests outside the profession are not to prevail. It is essential, therefore, that those elected shall be of the highest calibre—not simply in their policies but also in their ability to put them across to those outside the profession. Choice of champion is surely better after personal encounter, than from printed statements of policy.

General-practice Launch and Post-graduate Recharge

"Not enough is being done to interest pharmacy-school students in retail practice." That was the criticism put forward recently by the National Pharmaceutical Union's general practice recruitment and education committee (*C. & D.*, April 19, p. 336). Of too many of the schools of pharmacy—there are some notable exceptions—we believe it to be true.

Whatever its other shortcomings, the old-time pre-graduate apprenticeship did ensure that most pharmacy students acquired experience of retail pharmacy in practice. They knew, even if they switched later to some other type of pharmaceutical work, that it was not true that retail pharmacy had no content of "professional" work.

That knowledge must now be imparted in other ways, and we are therefore pleased Mr. H. B. Coulson, a member of the N.P.U. Executive who has given great attention to training problems, accepted our invitation to deal at some length, in this week's Training and Careers number, with the true prospects of a satisfying career in general-practice pharmacy. A copy of the issue is going out to every pharmacy student.

It may be that students' enthusiasm for general-practice pharmacy would be greater if all their lecturers had put their pharmaceutical knowledge to the test of a period of practice. Recently Dr. W. R. L. Brown, who became chief pharmacist at St. Bartholomew's hospital, London, after extensive research and academic experience, blamed the rapid expansion of the schools for the fact that so many had not. He told the British Pharmaceutical Students' Association at their conference in April that he hoped, as the rate levelled off, new appointments to school staffs would be made from among persons having experience in one or other branch of the profession. That must be recognised as good sense.

Also in this issue Professor A. R. Rogers argues the case for extension and refresher courses and discusses their structure. In the United States the pharmacy schools are appointing directors of extension studies, some of them full-time. In that way they are encouraging a two-way exchange of questions and information between teachers and practising pharmacists. More appointments of that kind would be of benefit in Britain too.

Any Business Questions?

My children have a small income from their grandmother's estate. The inspector of taxes insists that this is to be treated as my income for surtax. Is this correct?

SINCE the passage of the Finance Act, 1968 the investment income of minor children is required to be aggregated with that of their parents. Before that Act became law that was not the case.

I purchased my freehold premises some years ago, but I have now decided to retire. A company is proposing to acquire my business and I am also proposing to grant a lease of the property. How is the capital gain, if any, for the property to be calculated?

THE cost of the property is apportioned rateably between the consideration for the lease and the value of the freehold reversion and the proportion relating to the lease is deducted from the consideration money to give the amount of the gain. If the property was purchased before April 5, 1965 the due proportion falling after that date calculated on a time basis is chargeable.

Correspondence

Letters when received must bear the name and address of the sender, not necessarily for publication. The Editor does not hold himself responsible for the views expressed.

What Diluent?

SIR,—Is it too much to ask the manufacturers of liquid ethicals to state on the label what their stuff should be diluted with, instead of leaving us to guess? W. P. RICHARDS, Newcastle under Lyme, Staffs

Calligraphy

SIR,—I quite agree with Xrayser (*C. & D.*, May 3, p. 381) that a sum could be deducted from the capitation fee of medical practitioners for illegible writing and this could be passed on to the pharmacist as some compensation for time wasted. There is, however, no such thing as "bad calligraphy," as calligraphy is the art of beautiful writing. K. W. LEIGH, Coventry

What Was It?

SIR,—Your columnist E. C. Tenner writes (*April 26*, p. 370) of:—

- Not being able to help out a friend who requested 50 g of an ointment "because he [E. C. Tenner] did not stock the item"; and
- when presented with the same script being able "after consulting Martindale for the formula" to dispense same extemporaneously.

Such a situation intrigues me so much that I hope E. C. Tenner will tell us what was prescribed.

GALENESQUE

Give the Public the Facts

SIR,—How can Mr. Crossman (Secretary of State for Social Services) direct an Executive Council to withhold over £200 from a contractor due to unsupervised dispensing (*C. & D.*, May 3, p. 379) yet allow doctors to dispense without qualified supervision? It seems that there are two different kinds of laws for dispensing—unqualified supervision for doctors and qualified supervision for chemists. Bring this fallacy to the notice of the Press to let the public know the facts. RURAL PHARMACIST

Solution to a Metrication Problem

SIR,—In reply to Mr. J. R. K. Scott's letter (*C. & D.*, April 26, p. 368) we have for several years manufactured two preparations of injectible kanamycin under the trade name Kantrex injection. The concentrations available are 0.5 g in 2 ml and 1 g in 3 ml. In common with all other pharmaceutical manufacturers we are only too happy to give advice upon suitable diluents for our products and the dilution procedure to be followed. The example Mr. Scott quotes represents an unusual concentration, since our recommended dosage for kanamycin is 15 mg per kg per day for children under 50 kg, and 7.5 to 10 mg per kg per day for infants under 2.5 kg body weight. However, in order to arrive at a concentration of 6 mg per ml from a 1g/3 ml vial we would suggest the following procedure:

- withdraw the 3-ml content of a 1-g vial and dilute to 10 ml with water

for injection. This will give a solution containing 100 mg per ml.

- take 6 ml of this solution and dilute to 100 ml with water for injection. This will give a solution containing 600 mg in 100 ml or 6 mg per ml.

The diluents recommended for Kantrex injection are sterile normal saline or 5 per cent. dextrose in water for injection. Although kanamycin in solution is stable, and the potency of the diluted solution will not change by storage at room temperature or under refrigerated conditions during the first two or three months, the concentration of parabens will not be sufficient to prevent contamination by moulds. There is also the possibility that, owing to reduced concentration of sodium metabisulphite, the product may discolour to yellow or yellowish-brown. The discolouration, however, does not affect the potency. The recent introduction of a paediatric injection of kanamycin containing 75 mg in 2 ml solution will be of interest to hospital pharmacists who routinely undertake dilutions of this nature. Further particulars are available from the undersigned. J. CLOUGH, M.P.S., *Manager*, Technical Service Department, Bristol Laboratories, Ltd., Slough, Bucks

What "Recognition" Entails

SIR,—I have read with interest the correspondence from certain "qualified" gentlemen. To claim that elected membership to certain corporate bodies constitutes qualification is misleading. It may well be that such election is based on one producing evidence of sound academic achievement, but this is by no means certain. Surely it would be in the interest of the good name of many business transfer agents if principals of such companies were more realistic in the self-appraisal of their qualifications.

J. R. ENGLISH, A.M.R.S.H.
Dagenham, Essex

SIR,—I have read the two letters contributed to *THE CHEMIST AND DRUGGIST* (May 3, p. 390). It is true that it is not essential that any person or firm shall register with the Estate Agents Council although, without doubt, the vast proportion of recognised agents have membership and they are entitled to use the expression "Recognised by the Estate Agents Council." It is only possible to have membership of the Estate Agents Council if either the individual or the firm is a member of one of the recognised nine institutions, and it is not possible to apply for membership if you are a layman without qualifications but who establishes a business such as described in one of the letters under review. The Estate Agents Council's code of conduct applies to the sale of properties and businesses and anything else to do with estate agency which is connected with the transaction concerning the sale of the business or premises. I do not know of the existence of any business transfer agents in

pharmacy other than E. J. George & Co. and ourselves, and cannot understand our former employee's statement in connection therewith. I have no knowledge of any members registered with the Estate Agents Council who are not obliged to pay the retention fee, but I am aware that every member firm or body has to pay a heavy insurance premium for "honesty bonds" to cover any possible defalcations, which is most unlikely to arise with my company, who were established in 1846, whilst the business has been in the present family's hands for approximately eighty years. Some professional or trade journals have drawn their readers' attention to the Registration of Estate Agents, and an extract from the *Optician* (March 28, 1969) is set out hereunder. The insurance bonds are underwritten jointly by the Yorkshire Insurance Co. and the Alliance Insurance Co.

FIRST ESTATE AGENTS REGISTER

Nevertheless, the Council hopes to publish the first edition of a register of estate agents shortly. This register is expected to be in two parts. There will be an alphabetical register of individuals and also a topographical register of firms.

This is a start, and it is to be hoped that, although it is on a voluntary basis, the new Council will have sufficient control over its members so that registration really will be a genuine status symbol for a firm of estate agents. In the past, estate agents have gained a poor reputation in some quarters due to the activities of a minority. This appears to be a genuine attempt to sort the sheep from the goats.

The Council comprises a Chairman appointed by the Board of Trade, nine members appointed by nine Societies, six gentlemen appointed by the Board of Trade and three Estate Agent members appointed by the Board of Trade who do not belong to any of the nine societies. S. V. BROWN, London, W.1.

A Long-felt Want

SIR,—I thought you might be interested in the following note I was handed while doing a locum at a shop in Isleworth, Middlesex: "Three hand-bag-sized sized sanity towels please." Could this have been prompted by the stress of modern living?

JOE RIDGE,
Surbiton, Surrey



"Of course you've got twice as much dandruff as you had before using it—I told you it's good for dandruff."

PHARMACEUTICAL SOCIETY OF GREAT BRITAIN SPECIAL MEETING DATE FIXED

Society given permit to develop site

TWO announcements made at a meeting of the Pharmaceutical Society's Council held in London on May 6 were of considerable importance to members. One was that the Board of Trade was prepared to grant an office-development permit for the rebuilding of the Society's offices and development of the remainder of the Bloomsbury site.

Special General Meeting

The second was that the special general meeting called for by forty-seven signatories (see *C. & D.*, April 5, p. 295) is to be held in the Cafe Royal, Regent Street, London, W.1, at 8 p.m. on Wednesday, June 4. At that meeting the motion to be discussed will be:—

THAT this general meeting of the Pharmaceutical Society cannot reconcile acceptance of the restrictions in the Medicines Act, 1968, which limit the right of a pharmacist to prepare individual medicines upon request, and in accordance with his professional judgment, with the objects of the Society as stated in the Supplementary Charter granted in 1953, namely, "to maintain the honour, and safeguard and promote the interests of the members in the exercise of their profession"; that this meeting of the Pharmaceutical Society calls on the Council to make such representations as will be effective in removing the restrictions mentioned in the first motion."

When the chairman of the Education Committee (PROFESSOR BECKETT) presented a two-part motion:—

THAT the policy in relation to M.Pharm. courses in a specific subject be confirmed; and that the first year of the M.Sc. degree in hospital pharmacy at Heriot-Watt University be accepted as fulfilling the requirements of postgraduate practical training.

MR. J. P. KERR moved reference back, saying he felt uneasy about the matter. A working party was examining the ramifications of post-graduate training, and the recommendation appeared to accept an important principle that anticipated or cut across the work of that working party. MR. H. STEINMAN seconded.

MR. J. A. MYERS pointed out that, in the second year of the two-year course, the student would be doing two-year and not one-year training. MR. A. G. M. MADGE suggested that the Council would be in a difficult position if it accepted the recommendation of the Education Committee only to find that the working party was submitting a different resolution.

MR. J. P. BANNERMAN countered that the recommendation dealt with a specific permission in respect of the one course, and was not a blanket permission. It was specific inasmuch as the work during the first year was in conjunction with work within the hospital. The situation would be reviewed in the future.

PROFESSOR BECKETT said it might look as though the recommendation was establishing a principle that had direct implications with regard to the deliberations of the working party, but he emphasised that it concerned one-year training in hospital in which, during the term time of college, there was release for two days a week to carry out training directly relevant to hospital training. If that were carried out in the hospital environment no one could raise any question, but the academic side of the training, linked with the hospital, would produce a course that was much more relevant.

The motion to refer the recommendation back to the Committee was lost and the recommendation was adopted.

PROFESSOR BECKETT further reported that discussions had been held on the possibility of holding an experimental examination in the law and practice of pharmacy for use in connection with future reciprocity agreements. The examination would use "objective" questions, and a list had been drawn up of post-graduate students who could be asked to

volunteer to take part in the experiment. Papers would be anonymous, and the performance of the volunteers participating would in no way affect their prospect of registration. The Committee recommended holding such experimental examinations at times convenient to the schools of pharmacy in the areas concerned.

An inquiry had been received whether it would be acceptable for a post-graduate student undergoing practical training to attend a course leading to the M.Pharm. degree in a specific subject. The course entailed day release. No objection was raised by the Society provided the course involved no more than one half-day release, with evening attendances.

Meeting a request from the National Pharmaceutical Union for an exchange of views of representatives of the N.P.U. sub-committee on education and recruitment with representatives of the Society's Council, informal discussions were recommended to be held.

Agreement to serve on the working party on applied pharmacology had been received from three heads of schools of pharmacy (Professors N. J. Harper, D. A. Norton and J. B. Stenlake); a professor of pharmacology (Professor W. C. Bowman), a practising pharmacologist (Dr. M. Weatherall), a teaching-hospital chief pharmacist (Dr. W. R. L. Brown), and a representative of the medical profession (Professor C. T. Dollery, in a consultative capacity), under the chairmanship of Professor A. H. Beckett (chairman of the Education Committee). Terms of reference of the working party are "to consider the teaching of applied pharmacology to undergraduate and post-graduate students in pharmacy; to consider the rôle of applied pharmacology in pharmaceutical practice." The recommendations were adopted.

THE TREASURER (Mr. H. Steinman) reported that the balance sheet and accounts for 1968 had been approved and adopted. More than 96 per cent. of cards sent out in connection with the 1969 membership survey had been returned, and May 9 had been set as the date for receipt of returned cards. To complete the preparation of estimates of income and expenditure for the years 1970, 1971 and 1972 (required as basis for considering the future level of statutory fees) had been impossible, and the estimates would be presented at the June Council meeting. The recommendations were adopted.

The Organisation Committee, through its chairman (MR. J. C. BLOOMFIELD) recommended that, because of developments on rural dispensing, the motion on that subject to be discussed at the Branch Representatives' meeting should be taken at an early stage in the agenda. Submitted by the Sheffield and district branch, the motion reads:

THAT it is the opinion of this meeting that, in the public interest, the Council of the Society should continue, in conjunction with the Central N.H.S. Committee, to press the Department of Health and Social Security to allow dispensing by doctors only for those patients who, because of distance or inadequate means of communication, cannot obtain their dispensed medicines from pharmacies.

Regions

"Mercia" and "Yorkshire" were approved as names for regions associated with the pharmacy schools at Leicester and Bradford respectively. The Scottish Department Executive had accepted the Scottish branch secretaries' conclusion that its function, and the well established co-operation between branches, schools of pharmacy and the Scottish Department office, made regional organisation of the branches in Scotland unnecessary. The Committee recommended confirmation of that finding.

A member had asked whether the computer programme

for counting votes cast during the coming Council election could be written so as to obtain the following information: (a) Number of voters using only one, two, three, etc., votes recorded on the ballot papers of the elected candidates; and (b) number of ballot papers common to the elected candidates. It was felt that the information obtained

would be of no real value to the Society, and the Committee recommended no action.

On dispensing in rural areas it was agreed that pharmacy must make every effort to ensure that the question was kept before the Department of Health and Social Security.

(To be concluded)

Pharmaceutical Society of Northern Ireland

MONTHLY MEETING OF COUNCIL

THREE more branches of the Pharmaceutical Society of Northern Ireland have been established. Reporting at the Council of Society's monthly meeting in Belfast on April 17 THE SECRETARY (Mr. W. Gorman) said that meetings of members held in Coleraine, Ballymena, and Londonderry for the purpose of setting up district branches had been well attended and each had agreed to form a branch. The president (Mr. B. Flatley) had explained the purpose of each meeting and had given a brief *résumé* of the Council's work. Mr. J. Kerr had outlined some of the work of the Pharmacy Practice Committee, Mr. Wellwood had spoken about the health centres proposed in the various parts of the Province, and Mr. Gorman had outlined the events leading up to the profession's embarking upon the Craigavon project.

Unity Would Show Results

At the Coleraine meeting some members had held that pharmacists had been too willing to accept without protest the mass of legislation that was adding to their responsibilities without reimbursement and with no increase in status. THE PRESIDENT had pointed out that much more could be achieved if members were to present a united front. The new Branch appointed Mr. H. G. Campbell *Chairman* and Mr. B. R. E. Cheyne *Secretary*. At the meeting in Ballymena members from Ballyclare and Larne had attended. A suggestion had been put forward that the Council should distribute to pharmacists a statement that could be shown to members of the public explaining the law regarding repeats of prescriptions for Schedule-4 substances. THE PRESIDENT had suggested the matter was being taken up in another quarter; pharmacists in border towns had a real problem and anything to assist them would have the Council's support. Mr. W. H. J. Dalzell had been appointed *Chairman* and Mr. W. J. Bolon *Secretary*.

At a meeting in Londonderry members had been much interested in the provision of a pharmaceutical service in new health-centre areas, and the experience gained in areas in which consortia of pharmacists had already been formed. Little, if any, information was available about the health centres to be built in Londonderry city. Members felt they were cut off from events in Belfast and welcomed the opportunity to discuss current problems with the Council representatives. Mr. G. V. Duffy was appointed *Chairman* and Mr. D. A. I. Grant *Secretary*.

MR. J. C. WELLWOOD said that the recommendation of the General Purposes Committee urging an effort to form district branches had met with a good response. The idea had been put forward by the president, and its successful conclusion was in great measure due to his enthusiasm. It was agreed to accept the invitation of the Londonderry pharmacists to hold the next meeting of Council in Londonderry on May 15.

MR. KERR said that, following the discussion at the March Council meeting (see *C. & D.*, April, 5, p. 301) about informing members in areas in which health centres were planned about the courses of action open to them, a meeting attended by over 150 members had been held in the Society's lecture hall on March 27. MR. A. W. KERNAN (pharmaceutical officer, Northern Ireland General Health Services Board) had summarised the reasons why so many health centres were now being planned, and had

explained the statutory duties of the Board and of the Ministry of Health and Social Services. MR. KERR had spoken about the existing pharmaceutical service and the possible effects of the erection of health centres. MR. WELLWOOD had detailed the health centres that were being planned and their sites, where they had been selected. MR. GORMAN spoke of the Practice Committee's experience, gained in negotiations with pharmacists in areas in which a health centre (1) had already been built; (2) was being planned to include a dispensary; or (3) was being planned to include a pharmacy.

Questions had been asked about the possibility of giving a contract to provide a pharmaceutical service to each member of a consortium of pharmacists and about the position of employee pharmacists in areas affected. Since the meeting, approaches had been made to the Society by pharmacists in a number of areas for advice as to how the pharmaceutical service should be provided, and how the consortia should be organised. MR. H. G. CAMPBELL said the Health Committees were unaware of the Society's policy on health centres, a letter should be sent to each setting out the Society's views. THE SECRETARY pointed out that the six County Health Committees and two County Borough Health Committees had been written to over a year ago, and had been asked for particulars of their health-centres programme until 1972. Only two had replied, one by telephone suggesting an approach to the Health Services Board. MR. H. W. GAMBLE suggested that the approach should be made to the Ministry of Health and Social Services which in turn could write to each Health Committee. The suggestion was adopted.

Memorandum on Administration

A memorandum on pharmacy administration for the year ended December 31, 1968, was received from the Ministry of Home Affairs. Names on the Register of Pharmaceutical Chemists on that date numbered 1,143, seven more than in the previous year. The number of Registered Druggists remained at thirteen; apprentices or students had fallen from sixty-nine to thirty-nine. Twenty-two apprentices had qualified by examination as pharmaceutical chemists and been registered as such during the year. Licences to carry on the business of pharmaceutical chemist fell in number from 675 to 661. Of the total of pharmaceutical chemists' licences 192 had been issued to bodies corporate and seven to executors of deceased pharmacists. THE SECRETARY pointed out that the figure of 661 licences issued included a number for businesses that had changed hands. For such, two licences would be issued, and he thought the number of pharmacies in Northern Ireland would be about 650.

THE PRESIDENT referred to the death of Mr. Henry F. Moore, who had been a member of Council for over thirty years, holding office as *Treasurer* of the Society, 1937-40, *Vice-president*, 1940-42, and *President*, 1942-43. For many years Mr. Moore had acted as convenor of the social committee that organised the Society's annual dinner and dance. His many friends throughout Northern Ireland were conscious of the loss pharmacy had sustained by his death. Members stood in silence as a token of respect.

Apologies for absence were received from Professor O. L. Wade and Messrs. J. Gordon, R. J. Macauley, D. Moore, A. N. Morrison and J. D. Pollock.

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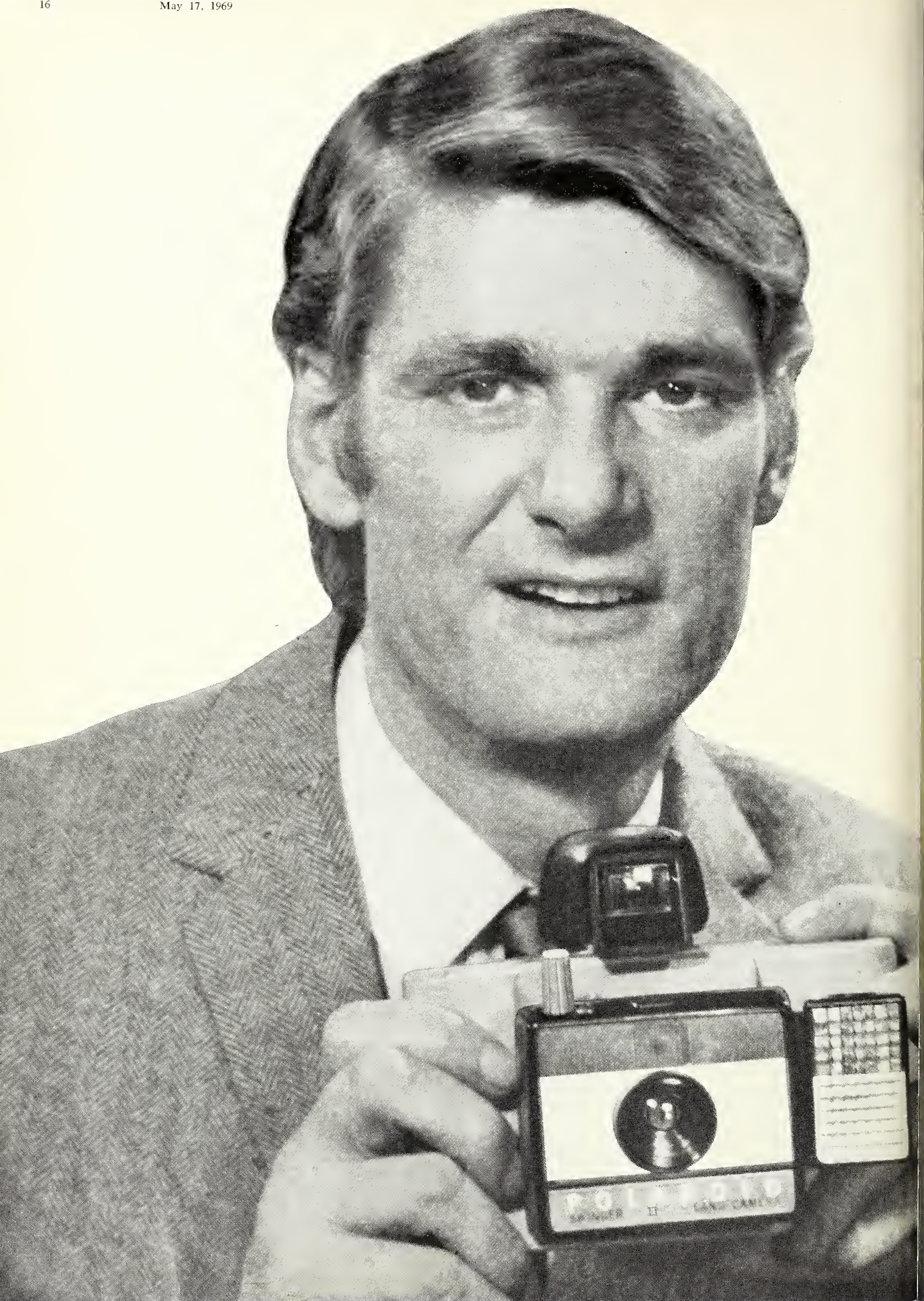
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We'll sell your customers this 3gn. bikini for 39'11 when they buy a Rio.

Last summer we advertised the Rio during the holiday period. Something no hairdryer manufacturer had done before.

But we're happy to say the gamble paid off.

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Retail sales for the June/August period rose by more than one third.

So this year we're going to promote a bikini offer to back up our new range of three models.

No extra work for you.

Your customers will simply send their order card direct to us with 39/11. And we'll send them a 3 gn. bikini.

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Both the offer and the new range will be advertised during the holiday period in Woman's Own, Honey, Petticoat and Nineteen. All full page, full-colour insertions.

We estimate that 2,116,200 women aged between 16 and 24 will have a chance to see the ad.

And, of course, we'll be supplying you with point of sale displays to back the offer.

Order enough stock.

You know the potential for hairdryers in your area better than we do. But we suggest you consider ordering 50% more stock than last summer. Something tells us you're going to need them.

Our single voltage model comes in blue and grey and will sell for £5. 19. 6.

The dual voltage job in the same colours is £6. 9. 6.

And the Rio De Luxe finished in matt black and complete with travelling bag, retails at 7 gns.

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Scope in the Shop

Pharmacy ownership offers the opportunity to acquire new skills while applying those already learned

H. B. COULSON F.P.S.

YOU will soon be qualified—or you have just become qualified—or you are doing a job that you took for interest and experience, but never meant to continue for long, or . . . Every so often there comes a time in life when you have to take stock of the situation, and decide where you want to get to in the future. And if you are taking stock, you are bound to consider retail pharmacy, and the possibility of becoming a proprietor pharmacist.

Skills

"General practice" is often criticised on the grounds that you cannot use most of your scientific training, and that you have to keep a shop, and sell non-pharmaceutical things that do not interest you very much, and perhaps you will be tied to your business and so on. But let us look at the reality. Experience shows that any scientist, whatever his line, receives more and more responsibility as he gets older. His work becomes more and more administrative until, maybe at the age of forty years or so, it often becomes entirely taken up by administration. The scientist comes to exercise the skills of management instead of those of science.

"Shopkeeping" nowadays is a definite exercise in the skills of management—which, incidentally, is very satisfying to carry out on one's own behalf. But in pharmacy management you continue to exercise your pharmaceutical skill.

Pharmacy is all about meeting the pharmaceutical needs of individuals. The shop is the last link in the pharmaceutical chain—the place at which the individual's needs are actually met. There is real "job satisfaction," not only in helping people, but in knowing the people that you are helping, and experiencing their gratitude and esteem.

Financially, most jobs have definite limits. But there is no "upper limit" for the proprietor pharmacist except that imposed by his own energy, ability

and inclination. And whereas in commerce the higher you climb the less, in general, is your security, when you own your own business the reverse is true. So proprietorship offers you job satisfaction, financial reward, security and, in addition, independence, an interesting career and many other benefits.

Those benefits do not all flow naturally as a reward of a three-year course at college and a year's practical experience. The training is but the starting point from which successful proprietorship has to be achieved. What is necessary for the transition? The answer is knowledge, experience, and money. The wise course at the training stage is to assess what is needed, and then to set about getting it. Let me agree at once that, for economic reasons that will emerge, a pharmacy will not achieve an acceptable degree of profitability solely from the sale of medicines and surgical supplies to the community likely to come to it. A satisfactory profitability will, however, be achieved if sales of goods "traditionally associated with pharmacy" are added.

Knowledge

In this context knowledge and experience are closely linked: experience is knowing how your theoretical knowledge applies to real life situations. We may list the additional knowledge required under the following headings:

1. Pharmaceutical knowledge. Many practical applications will need to be learned that did not crop up in the post-graduate year; and probably theoretical knowledge gained at college will need to be added to or deepened.
2. Experience of handling customers. Assuming you are a reasonably competent pharmacist your success as a proprietor will probably depend more on customer handling than on your technical ability.
3. Experience of the problems that

customers bring to you.

4. Experience of staff management.
5. Experience of business management—buying, selling, display and merchandising, stock-keeping and stock control, rate of stockturn.
6. Financial control, the balance sheet, profitability.
7. Knowledge of surgical appliances.
8. Specialised knowledge—photography, veterinary medicine, cosmetics, diabetic requirements, etc.

How is the additional knowledge to be obtained? For a start, admit to yourself that your skills are chiefly technical and avoid the three errors now to be identified. First, do not retire into the dispensary, where you feel most "at home." Get out into the shop and learn. Second, because your technical knowledge may be more up-to-date than that of an older pharmacist under whom you are working, do not imagine that you have nothing to learn from him. If you are willing to learn you will find that he has much to teach you. Third, do not try to become a manager at too early a stage; at least for a year or two try to work under an older man whom you respect—your earnings will probably not be less during that period anyway.

Clearly your programme should be: work for at least a year or two as an assistant pharmacist, then spend a period in management (if possible of a medium-sized, and then of a larger, business) before setting up on your own. Use the period to learn about *everything* that is sold in the shop.

Learning

If you cannot answer every question that is asked of you, make sure that you find out the answers. You can learn from other pharmacists, from sales assistants, travellers, manufacturers, literature, trade journals, reference books, and—if you have access to it—from the National Pharmaceutical Union staff training course. Study how to handle people, cust-

omers, doctors, travellers, staff. If you get a chance to do so, attend a course on staff management.

While you are working for someone else, do so with the same keenness and diligence that you would show in working for yourself, not only because it is honest to do your job well, but also because you are acquiring practice in working for yourself. Learn all you can about good buying and about stock control. Also about window and internal display, noting what is effective and what is not. Gladly accept any responsibility in shop routine, and try to make a success of any job entrusted to you. The experience you accumulate in doing so will stand you in good stead later on. Management seminars are becoming more common; attend them whenever the opportunity arises. If you show yourself interested in increasing the profitability of the business in which you work, you will usually find that financial information is made available to you. Be sure to learn all you can of any speciality (veterinary medicine, for example) of the business in which you are working. Ladies will no doubt study the toiletries—and men might do worse! Take up photography as a hobby. It will prove rewarding as well as interesting.

By now you will probably have some idea of the sort of pharmacy that you hope to own. It is a good idea, when you feel ready for management, first to try to get a good "average" business to manage, and later one of the type that you hope to own. Again put your back into the job and do your best. This is your "trial run" for proprietorship!

Long before you reach this point you will have been considering the type and position of pharmacy that you wish to buy. North, south, east or west? City or large town, small town or village, seaside or inland? It is safe to say that the more desirable the area you select (for example the south-coast resorts), the more you will have to pay for goodwill. Conversely the fewer conditions you impose the better the bargain you will be able to pick up.

Area

Large - town pharmacies divide roughly into "High Street," suburban, and perhaps "working-class" areas. High Street rents in the past few years have risen so rapidly that a large turnover is needed in order to be able to pay them. This in turn implies large stocks and, since medicinal products form a lower-than-average proportion of turnover, other sides of the business, frequently cosmetics and photography, must be developed. Indeed, it may be necessary to convert the pharmacy into a small departmental store. That in turn may mean a large and expensive staff, and although the financial

return of such a business may be abundantly satisfactory, it certainly requires a large investment of capital.

The suburban business — the kind found in a "secondary shopping centre"—serves the residential area in which it is situated. Usually well balanced and not too dependent upon any particular type of trading, it is usually pleasant to run and not too difficult to staff. In an area that is still being developed the prospects are excellent, but be cautious of an area already fully developed and with people beginning to move away. In "working class" areas National Health Service dispensing often provides the bulk of the turnover. A pharmacy in such an area may demand less capital investment than any type, but it suffers the great disadvantage that it is the most vulnerable to any adverse change in National Health Service remuneration. Likewise it is vulnerable to movements of doctors either setting up their surgeries elsewhere or leaving the area.

Small-town businesses are often safe, well balanced, not likely to suffer from fresh pharmaceutical competition, and may be extremely prosperous, but they may also offer little scope for expansion. Rural-area businesses are operated in a pleasantly relaxed atmosphere, with the proprietor usually held in high esteem, and the trading activities are well balanced. But, unless a sufficiently large community is being served, one's range of merchandise may have to be extended in order to achieve a satisfactory turnover. Particularly attractive are the "dormitory villages," three or four miles outside a large town, where the population is able to support a well balanced pharmacy, is usually fairly affluent, and is still increasing in numbers.

Rewards

In view of present-day pharmaceutical salaries, it is safe to assume that £3,000 p.a. is the lowest return likely to interest a proprietor running his own business, but £3,500 or £4,000 p.a. is a more likely goal. Various methods of calculation show that a business turning over £25,000 p.a. will return to the proprietor about £3,500 p.a., £27,500 p.a. about £3,850 and £30,000 about £4,200. Let us take the middle figure. Such a business may cost about £10,000. On average each person spends about £4 p.a. (including his National Health Service prescriptions) at a private pharmacy. That argues a need for a population of 7,000 to be served (though let me hasten to add that, since the total spending per head on goods considered traditional for pharmacy is about £7 10s. p.a., the same turnover can be achieved on a lower population by attracting a bigger proportion of their spending). It is also evident that a much larger population would be required to support a

pharmacy by purely pharmaceutical sales. That would have the effect of pushing pharmacies so far apart that medicines would be purchased wherever a customer has other more conveniently sited sources of supply available.

Finance

How can such a purchase be financed? First, of course, from private or family resources. If that is not possible, then ideally by a bank loan, preferably in the form of a running overdraft, as that attracts the lower interest charges. But bank loans are difficult to come by at present, and banks do not like long-term loans, so that at best you would need to be able to put up the greater part of the purchase price, and to repay the loan in about three years. For practical purposes the best prospect is a loan through the National Pharmaceutical Union Business Purchase and Guarantee Fund which will, in suitable cases, and subject to suitable security of tenure, etc., advance up to three-quarters of the purchase price, repayable over a period of up to seven years. To be eligible for a loan you must have been an investor member of the Fund for at least one year, with a minimum investment of £100. It may be added that other methods of finance are available which may sound attractive but which often involve the payment of a fixed rate of interest on the whole amount of the loan for the whole period over which any part of the loan is outstanding (as opposed to interest on the outstanding balance of the loan only). In real terms this may prove very expensive borrowing. There is the possibility of entering into a junior partnership, with an option to increase your stake in the company as you can afford to do so.

Whichever method you contemplate it is clear that the more ready money you have available the easier will be your purchase. The National Pharmaceutical Union scheme, for example, for a business costing £10,000 will require a minimum stake from you of £2,500, so clearly your time of gaining practical experience must also be a time of thrift to accumulate the necessary capital.

Further information may be found in the booklet "Pathway to Proprietorship" which is obtainable free of charge from the Secretary, National Pharmaceutical Union, Mallinson House, 321 Chase Road, Southgate, London, N.14.

Your goal is to own a substantial business. As a proprietor pharmacist you will be able to employ your pharmaceutical skill and business acumen in a manner that is of important benefit to the community, and both satisfying and rewarding to yourself. Good luck to you!

"Post-experience" Education

Courses must provide for pharmacists wishing to catch up, to build on foundations or to specialise

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IT now seems generally accepted in pharmacy that post-graduate and post-experience instruction is "a good thing." The implication is that the pharmacist's original qualification is in some ways inadequate, and there are perhaps three ways in which that is bound to be so. Correspondingly there are three ways in which the deficiencies may be remedied. First, new developments occur that could not reasonably have been foreseen, and on which practising pharmacists have to "catch up." A good example was the introduction in the 1940's of penicillin and other antibiotics. There followed a mushrooming of special courses for pharmacists in general practice who wished to obtain licences under the Therapeutic Substances Act, and who needed to learn a new technology.

Stimulus

Secondly, a pharmacist may be glad of the opportunity, even when his first degree or diploma provides an adequate foundation for changes in therapy or in pharmaceutical practice, to extend his learning. In so doing he may experience the stimulus of a well presented lecture or sharpen his mind by discussion with colleagues on pharmaceutical problems and their solution. Examples of such "keeping up" courses are those provided during the past three or four years for hospital pharmacists undertaking quality-control work, and the various refresher courses on advances in pharmacology or forensic pharmacy. Recently there have been meetings all over the country to discuss metrication of medicines—necessary, despite the facts that every pharmacist has long been well acquainted with the metric system, and that many written sources of information have been provided about the correct procedures for dispensing prescriptions written in the apothecaries' and imperial systems.

The third way in which a pharmaceutical qualification is inadequate is that, in equipping its holder reasonably well for practice in any branch of the profession, it is unlikely to be able to

provide enough technical knowledge for those who wish to proceed to certain specialised employment in industry, hospitals, teaching and research. Two-tier systems have therefore developed almost automatically, with some higher qualification provided for those who need to specialise. Over the years we have seen the Minor and the Major examinations; the Chemist and Druggist and the Pharmaceutical Chemist qualifications; and now the Bachelor's and the Master's degrees.

The accelerating progress in pharmaceutical technology, and the increasing need and desire of pharmacists to know about the actions and uses of medicines, make catching-up more and more difficult. How can one help those who qualified in 1930 and whose curriculum included no physiology? It is hard enough to help those who qualified twenty-five years ago with a knowledge of physiology and little or no pharmacology. Special credit is due to the Portsmouth School of Pharmacy for its part-time course in basic physiology, which is provided specifically as a background to pharmacology for those whose own training in the subject, or recollection of it, is inadequate. Undoubtedly a call for such courses exists all over the country.

Timing

Courses of the kind required must often be provided in the evenings, since locum difficulties militate against day release. They also have to compete with the other interests, professional and non-professional, of those who might like to attend. Perhaps the Department of Health and Social Security will be able to provide more positive encouragement, as is already being done for medical practitioners. At the same time the universities and polytechnics must be ready to provide the facilities and lecturers, though in future they are likely to have to charge economic fees. The days when the local authorities will subsidise refresher courses seem to be going. No doubt the new regional organisation of the

Pharmaceutical Society's branches will add an extra impetus. The Society is especially likely to make sure that the centres used are geographically convenient.

Women

A substantial group of pharmacists who need help with "catching-up" are those, especially married women, who have relinquished the practice of the profession for a number of years, and who wish to take up pharmaceutical employment again. Such people are likely to want, for example, instruction in recent changes in pharmaceutical legislation, metrication, new dosage forms (such as sustained-release preparations and pressure packs), developments in eye drops, and pharmacology and therapeutics. It is surprising that no courses of that nature have apparently been provided in England and Wales, but Heriot-Watt University organised in Edinburgh in March 1968 and 1969 one-week full-time courses. A dozen pharmacists attended each year. Experience shows that the individual circumstances of those participating may vary so much that the lectures, practical work, discussions and so on must be organised on an informal and flexible basis, to enable everyone to get during the week exactly the help they need. If a substantial amount of supporting material is provided as part of the course (for example duplicated lecture notes, a copy of the British National Formulary, reprints of relevant articles and a substantial bibliography) then those may be taken away and studied at home after the course has ended and are available for reference as required from time to time.

The Ph.C. course was criticised by some for its concentration on pharmaceutical practice and applications, as distinct from the underlying sciences. It is to be hoped that undergraduates nowadays are educated rather than trained, so that they have a good foundation on which to build, especially the ability to learn as well as to be taught. Such education should make

it easier for the graduate to keep up to date in the years ahead. Even so, the private reading of books, journals and articles is likely to be inadequate, and the opportunity for feed-back and give-and-take provided by lectures or courses with accompanying discussion is important. Little use seems to have been made in pharmacy of correspondence courses, and perhaps that method of instruction should be considered more seriously, especially in conjunction with programmed learning techniques.

Courses of evening lectures, often organised by the Pharmaceutical Society's branches, are usually popular, and those who attend may gain some glow of inner satisfaction. But do they really learn much in attending? Dr. Chilton recently suggested that something might be said for a measure of assessment of students' work in such lecture series—just enough to motivate the student to take the whole thing seriously. In any case a "good" attendance often means fifty out of a potential 400, and few of the fifty are general-practice pharmacists. How can one reach the many who are most in need?

It is necessary to remember, too, the variety of courses provided at a local level in non-pharmaceutical circles—for example, in law, accountancy, stock control, management and first aid. The hospital service is already making

opportunities for chief pharmacists to attend courses in management and administration, and it is probable that that policy will soon extend to other grades of pharmaceutical staff. Though it may be argued that some or all of those subjects should be provided by the schools of pharmacy as part of the degree curriculum, surely those already in the general practice of pharmacy would also benefit from receiving such instruction. There should be no difficulty in getting help from local technical and commercial colleges. Perhaps branch news-letters could give encouragement by affording publicity to the facilities available in their localities.

Courses leading to the degree of Master of Pharmacy or Master of Science in Pharmacy, primarily for persons intending to take up careers in hospital or industrial pharmacy, are becoming popular. Examples are those in pharmaceutical engineering, pharmaceutical technology, biopharmacy and pharmaceutical analysis at London University, in pharmaceutical analysis and forensic science at Strathclyde University, and the M.Sc. course in hospital pharmacy that starts at Heriot-Watt University in October. Such courses may be held full-time during one year or part-time during two years and they usually incorporate project work as well as formal teaching. It seems curious that universities appear rarely willing to provide courses intermediate

in length between a week and a year. Is there so little demand for courses lasting for one to three months? Financing Masters' courses is a real problem, for they are expensive both in staff and equipment, and may be beyond the resources of an unaided institution. The polytechnics are restricted also by the requirement of a minimum enrolment that sometimes seems unreasonably high. Some courses are run substantially in the evenings, and one wonders whether that is entirely fair to the students. It is a pattern of study that, despite its virtues, is largely disappearing from other disciplines. To what extent do pharmaceutical educators seriously consider the patterns and methods adopted by other professions? We must always remember that problems of keeping up and catching up are not confined to pharmacy. What do others do in similar situations? What can one learn from them?

One other aspect of post-graduate study has not been considered in this article, namely the pre-registration year. Is that a year of practical training or of practical experience? The policy of the Pharmaceutical Society's Council on the matter has for a number of years seemed to be ambiguous, but it is understood that a working party is considering the matter and will shortly be making recommendations. It is to be hoped that the Council will then give a clear lead to all concerned.

Training, the Job and the Future

Some examples of what to expect

IN RETAIL WITH THE MULTIPLES

NOT every pharmacist with a liking for business administration wishes to "go it alone" in his own pharmacy. Many, in fact, prefer the security of management within a group or chain, with the opportunity to reach senior management or board positions later. The choice is wide, ranging from groupings of independent proprietors, through private chains, to the big public company multiples.

An example of the private company chain is E. MOSS, LTD., Fern Grove, Feltham, Middlesex, who operate forty-one pharmacies in West Middlesex, Surrey and Buckinghamshire. After six to twelve months gaining experience in a locum capacity, a young pharmacist would be appointed to junior branch management. Promotion to larger branches follows, depending upon

ability and initiative and, for those prepared to identify their future with the company, there is the possibility of appointment to executive status, with responsibilities for the professional, purchasing, merchandising or personnel functions. The ultimate possibility is a board appointment. A limited number of post-graduate students are taken each year, the time being spent in one of the larger branches under the supervision of a senior manager with proven training. Salary in the post-graduate year is £950 a year for the first six months and £1,000 for the second six months. On registration, the salary becomes £1,700 and would thereafter rise rapidly in relation to the experience gained and post held.

A rapidly expanding group is the STANLEY WESTON GROUP, LTD., with

nearly 200 branches. In such a company the career prospects are excellent because managers for the larger branches now being developed are promoted from existing pharmacies, creating openings at the lower levels. Soon there will also be vacancies for area managers, who again will be selected from among shop managers. Salaries offered compare favourably with those offered in other companies and there is a non-contributory superannuation scheme. Annual holiday is four weeks, and in many areas accommodation is available for staff. All pharmacist directors and senior executives on both wholesale and retail side have come up from branch manager level.

Largest of the public companies operating pharmacies is, of course, BOOTS PURE DRUG CO., LTD. In the company's retail branches in all parts of Britain post-graduate registration-year positions are available and en-

agement there is closely followed by management training for suitable candidates. In fact, pharmacists are now being considered for appointment as branch managers within eighteen months of registration. Post-graduate salaries are £1,015 to £1,100, according

to district, and pharmacist's salaries range from £1,385 to £1,665, according to experience, district and responsibilities. Managerial salaries begin at £1,900 per annum, plus bonuses, and positions carrying salaries of about double that figure are attainable.

IN HOSPITAL PHARMACY

THERE is probably no finer training in practical pharmacy than that available in a teaching hospital. Whichever branch of pharmacy the student has in view, time spent in such a department is unlikely to have been wasted. For example, small-scale manufacturing is frequently carried out and the intending industrial pharmacist will never regret having seen at first hand where, how and why the products he may be developing or selling will be used. If general practice is the goal, the chance to face a wide variety of pharmaceutical and medical problems under expert guidance will serve to consolidate that aspect of the degree training before the challenges presented by business have to be faced. For a career in hospital pharmacy itself, of course, teaching hospital experience can provide a flying start.

Whilst almost any teaching hospital is able to offer a good all-round training, some may hold particular attractions for the individual because of their special interests or facilities. The ROYAL FREE Hospital, London, W.C.1, for example, gives experience in a number of specialist fields, including chronic renal dialysis. It offers day-release to study for higher degrees and a research programme also operates within the department. A new system of dispensing drugs for in-patients is at present being investigated.

At ST. GEORGE'S Hospital, London, S.W.1, students receive training in each of three sections—general dispensary, sterile products laboratory, and manufacturing and quality control laboratory. Post-registration education is again encouraged and a "ward pharmacist" scheme is being planned.

An idea of the breadth of hospital training can be seen from a look at the pharmacist's work at ST. THOMAS'S Hospital, London, S.E.1, which involves in- and out-patient dispensing, ward stock (including drug safety, quality control and supervision of ward storage of drugs), sterile products and galenicals manufacturing, group pharmacy store and distribution work, purchasing and therapeutic trials, and drug information. Students spend about two-and-a-half months in each of five sections of the pharmacy.

Away from London, the UNITED BIRMINGHAM Hospitals have, at the Queen Elizabeth Hospital, a sterile-products laboratory producing a wide range of transfusion solutions and other injectables. The regional quality-

control laboratory is also sited at Queen Elizabeth's and facilities are offered for research. Exceptional experience in the development of paediatric medicines is available at the Birmingham Children's Hospital.

ADDENBROOKE'S Hospital, Cambridge, is one of the smaller teaching hospitals. As such it offers a closer relationship between pharmacy and medical and nursing staffs than is sometimes possible in larger units. Sterilising and manufacturing sections are still to be found, however, and every effort is made to give students wide experience—as a result, a high proportion take up permanent posts within the department.

The UNITED LEEDS' Hospitals operate a "ward pharmacist" scheme throughout the group and senior pharmacists are in charge of production areas of the department and the regional quality-control department. Students are introduced to the full activity of the department and also take part in seminar sessions on the organisation of the

National Health Service, the hospital service itself and the place within that organisation of the pharmaceutical services. Discussion takes place on the uses of new drugs with departmental staff and clinicians of the hospital. One pharmacist occupies, in association with the School of Medicine, a research appointment that is tenable for three years and leads to the degree of M.Phil. Research is carried out in the department of pharmacology in the Medical School on a project allied to the practice of hospital pharmacy.

Among the products manufactured within the UNITED NEWCASTLE UPON TYNE Hospitals group, centred on the Royal Victoria Infirmary, are a range of dermatological preparations and ophthalmologicals. Infusion and other sterile medicament manufacture is also carried out.

In the hospital service, the post-graduate student receives £825 plus £25 degree allowance. Immediate post-registration scales are £1,087 to £1,366 (basic grade) but appointment to senior pharmacist level (£1,151 to £1,434) is usual in one or two years—within a year in some areas. Three to five years' experience should provide an opportunity to become a deputy chief pharmacist. Scales quoted are subject to a 6 per cent. increase (actual figures not yet announced) and there may be additional payments for evening clinics.

IN PHARMACEUTICAL MANUFACTURE

THE pharmaceutical industry offers perhaps the widest spread of careers for pharmacists, from technical and professional to commercial. However, advancement usually involves a decision to concentrate on one of these activities.

If a student has interests in a particular product area, choice of company may be important. Sometimes a wide product range may be an advantage, such as that of the GLAXO GROUP, LTD., which has interests in foods, vaccines, antibiotics, immunologicals, steroids, etc. Graduates are employed in research, formulation and development, product supervision and analytical work. In all of these fields the training can be made acceptable for registration purposes.

At ABBOTT LABORATORIES, LTD., most vacancies occur in research and development, production management and control, market research, product management and selling, and specification control. Pre-registration training is available in most of these areas. Graduate pharmacists normally start at about £1,200 and, depending upon merit advancement, should be receiving at least £2,000 by the age of twenty-eight. A similar starting salary could be expected at MILES LABORATORIES, LTD., where there are avenues of pro-

motion in all the usual departments, both in Britain and the United States. Pre-registration training is available in the quality control and pharmacy development laboratory and supplementary professional training, both internal and external, is available and encouraged.

The industrial side of BOOTS PURE DRUG CO., LTD., offers positions for pharmacists in research and development, marketing and administration. A limited number of post-graduate positions lead to registration, and supplementary training mainly involves attendance at specialised technical courses. Salaries start at £1,120 to £1,150 per annum and are not affected by registration, progress being on merit and job contribution.

Wholesaling and manufacturing activities may sometimes be combined, as at AYRTON, SAUNDERS & CO., LTD., 34 Hanover Street, Liverpool, 1. Pharmacists are employed by the company in sales, manufacture, analysis, and export, but no facilities exist for pre-registration training. UNICHEM, LTD., Crown House, Morden, Surrey, employ pharmacists as senior executives ranging from assistant depot manager, through depot manager to regional manager. Salaries are from £2,000 on appointment.

TRAINING AND RESEARCH AT THE SCHOOL BATH UNIVERSITY OF TECHNOLOGY

WHAT is important about the School of Pharmacy at the Bath University of Technology at the present time is not its premises but its philosophy and policy. For although the department is almost fully transferred from Bristol, and fully operational in training undergraduates at Bath, it is still in temporary quarters.

The department's own new purpose-built building, on which the limelight will undoubtedly become focussed once it has been completed, has yet to have the first stone laid, though its site has been cleared in readiness for construction to start. Meanwhile the department occupies laboratories and rooms designed for others—principally for the School of Chemistry, which was the first to make the switch from Bristol to Bath, coming into a "stake-claiming" building that was expeditiously erected on the Claverton Down site at Bath, and among the first, likewise, to get its own permanent building.

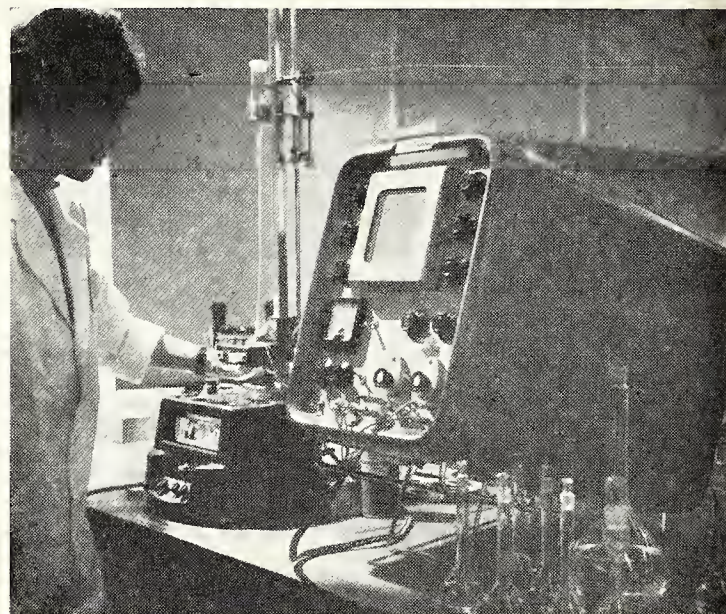
Progress in Joint Projects

Where the School of Pharmacy has made great progress since its transfer is in the organising of research, especially by way of joint projects with the medical staffs of local hospitals, with medical engineers in the city, with industry and with the National Research Development Corporation.

As would seem appropriate in a technological university—an institution created as part of "the wide recognition by the Government of the necessity for providing the country with an adequate number of well qualified scientists if it is to maintain its industrial position in a highly competitive world"—Professor Norton and his colleagues favour research projects that are likely to bring practical results and are content to leave to others the more speculative or long-term academic exercises. His own work on the presentation of products used in ophthalmology is well known. It is part of shared investigations at the University into the general field of drug stability, especially during storage, under irradiation, in varying conditions of heat and humidity, etc. Thus Professor R. J. Ancill (Professor of Pharmacology) is working on the uptake and distribution of drugs within ocular tissues, and on the clinical pharmacology of anti-inflammatory drugs; and Dr. M. R. W. Brown (senior lecturer in pharmaceutical microbiology) is studying chemical antimicrobial agents in ophthalmology and, in work sponsored by the Medical Research Council, the resistance of *Pseudomonas aeruginosa* to chemical inactivation.

In a quite different, but equally utility-based research (and in a greenhouse provided by the Tropical Products Institute), Dr. R. Hardman, senior lecturer in pharmacognosy, is working on the anatomical features of steroid-yielding plants and on the isolation and biosynthesis of plant steroids, projects sponsored by the Ministry of Overseas Development and the N.R.D.C. Those are representative examples of grouped research organised within the university. Taking part in the researches are not only the members of the staff named but, in the current session, fifteen full-time and four part-time post-graduate students.

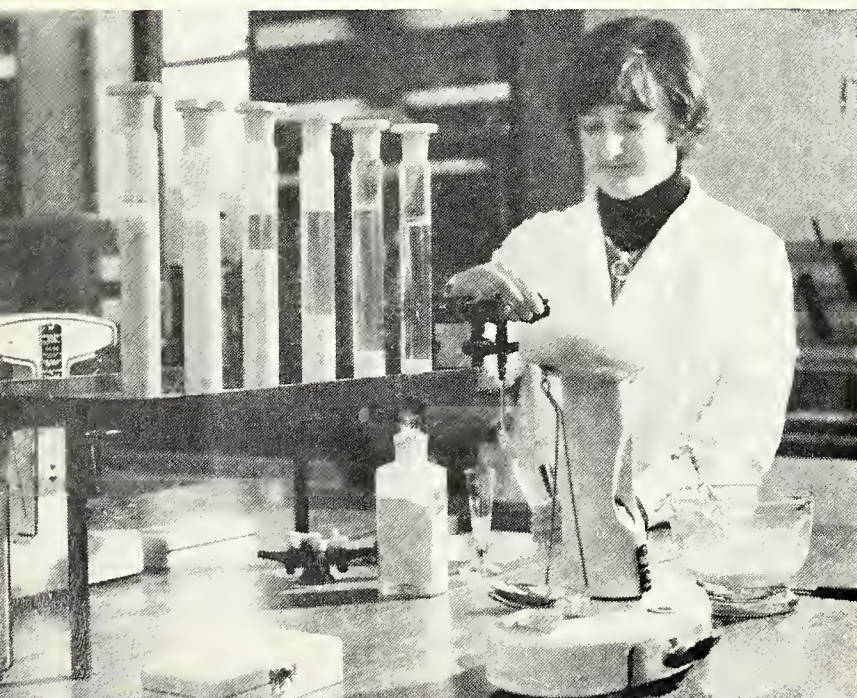
A similar approach is reflected in the scheme of undergraduate studies, which are organised on a five-group system (pharmaceutics, pharmaceutical chemistry, pharmacology, pharmacognosy, pharmaceutical microbiology) which avoids isolating those subjects into water-tight compartments, and trains the student in tackling one subject to see parallels, analogies and related factors in the others



PHARMACEUTICAL MICROBIOLOGY. Polarographic study of bacterial spores

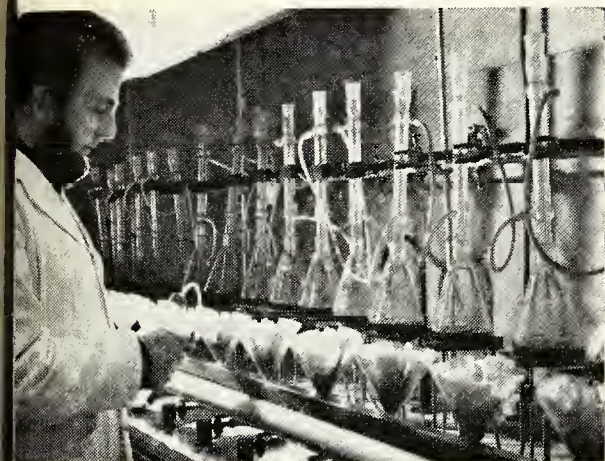
and to see them all as clearly parts of a pharmaceutical whole. Each "school of study" co-operates with others in arranging teaching and research in its own field.

The University occupies a 200 acre site at a high altitude in relation to the city, and terraced from south to north. The eventual collection of buildings will comprise a compact "town," whose inhabitants will work, eat, shop, relax and sleep in close proximity with one another. There will be areas of intimate contact and private quarters into which the student may seclude himself. (At present most of the students live in approved "digs" in the vicinity). The first buildings to go up have naturally been those most concerned with the everyday functioning of a university—laboratories, lecture rooms, administrative offices, refectories, service rooms and the rest. They are on four 16-ft levels each signposted in a distinctive colour, and the rooms are code-labelled to indicate floor level, room number and tenant or function. Each "school nucleus area" has a "servery" at which snacks are provided, and there are areas equipped with little but chairs, where students may relax with other students, staff with other staff, or where they may intermingle.



PHARMACEUTICS: Flocculation/deflocculation study on aqueous kaolin emulsions.

PHARMACY,

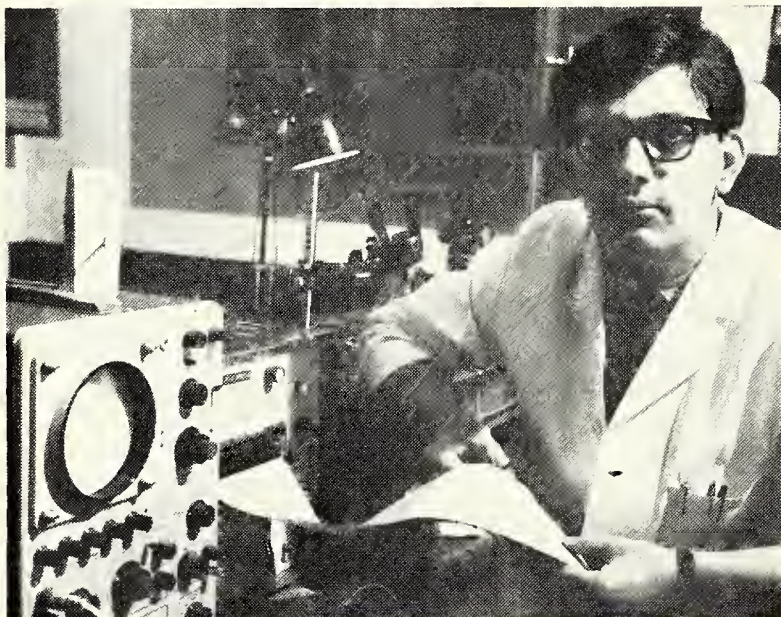


PHARMACOGNOSY: Acid hydrolysis of steroidal glycoside-containing plant material and collection of released steroid

At right, **PHARMACEUTICS:** Students carrying out practical dispensing operations



Analysis of metal content of bacterial cell walls



Neuropharmacological studies of the ureter

In the pharmacy school there are currently 130 undergraduate students, plus a small number studying for an honours degree in pharmacology. In the next stage, when the school's purpose-built accommodation comes into use, there will be an annual intake of sixty pharmacy students plus twenty taking the degree in pharmacology. Later a degree in human biology is being introduced. Some of the pharmacy and pharmacology degree students spend part of their study time in hospitals in the city, where they take part in seminars with the medical staffs. Liaison with the hospitals extends to joint projects in the study of rheumatology and into the mechanism of inflammation and brain biochemistry. The hope is that in due course a joint research institute will emerge. A promising activity with which the School is associated is that members of the Bath Institute of Medical Engineering are enabled to study the practical problems of their subject at the patient's bedside. The institute is registered as a charity and as a limited company and is effecting design improvements in equipment such as mobile chairs and special boots for the disabled and in apparatus for cardiovascular monitoring, for anaesthesia and for blood transfusion.



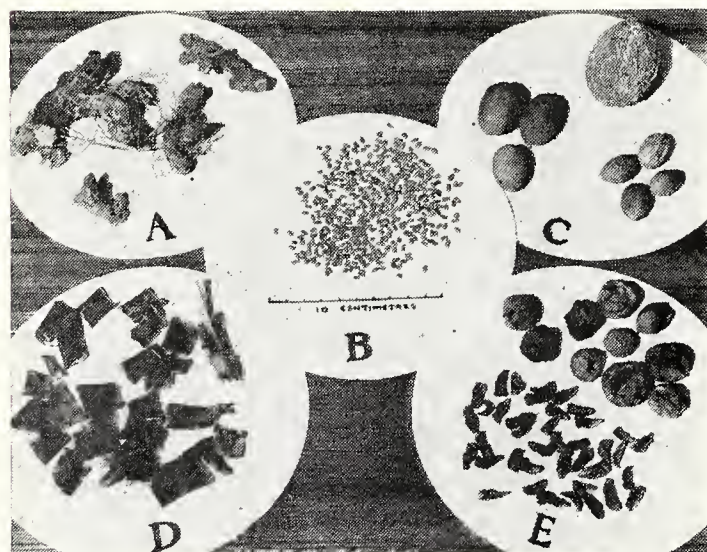
PHARMACOGNOSY GLASSHOUSES:
Species of *Solanum*

However, the main function of the school remains the training of pharmacy graduates, and the facilities it has to offer attract an increasing number of applicants. Of the whole country's 1,200 applications for places in pharmacy courses in the 1968/69 session, no less than 900 put Bath somewhere on their list of preferences. That means that the University authorities stand a fair chance of being able to select entrants who start with the right basic qualifications and seem most likely to profit by the instruction offered. An indication that, by and large, the selection procedure is sound is that about 50 per cent of the undergraduates go into the "honours" stream, which takes them through the course at a faster pace and on to a minor research project. A feature of the courses for all students is the inclusion of a "humanities" content, in which some element of choice of subject is open to student vote. Noteworthy in this respect is that the opinion of current students has reversed that of an earlier student "generation." One group plumped for sociological studies, as providing an appropriate background to the practice of a paramedical occupation, the other for "general" studies as being of more liberal character and giving greater opportunities of cultural intercourse with graduates from other disciplines. Whether the future will reflect similar "see-saw" changes of attitude may prove revealing.

Full Spiral

The school is, it is profitable to recall, the lineal descendant of the school of pharmacy in the West of England. Founded in 1907 in Bath as a private venture, it was transferred in 1929 to the Merchant Venturers' Technical College, Bristol. In 1949, when responsibility for technical education was assumed by the local authority, it became known as the College of Technology, Bristol. In the Autumn of 1956, with the other science departments of the College, it occupied new premises at Ashley Down, Bristol, and considerable expansion of activity followed. From 1960 certain departments, including pharmacy, were developed as a College of Advanced Technology under the title "Bristol College of Science and Technology" and, with the granting of university status in October 1966, the institution became the Bath University of Technology it now is. Its occupation of temporary accommodation on the main University campus at Claverton Down came in 1968.

The main objective of the Bachelor of Pharmacy degree course offered by the university is to provide a sound theoretical and practical training in the pharmaceutical sciences, supported by a broader educational programme. The degree is awarded at Honours and Pass levels and is accepted by the Pharmaceutical Society of Great Britain



PHARMACOGNOSY: Plant raw material for steroid industry: A, *Dioscorea* tubers. B, Fenugreek seeds. C, Fruits of various species of *Balanites*. D, Sisal leaf (chopped). E, Fruits of species of *Solanum*.



PHARMACOGNOSY GLASSHOUSES: Dormant tubers of species of *Dioscorea*

for the purpose of statutory registration, subject to fulfilment of practical training requirements. The course extends over three academic years and students are encouraged to gain practical pharmaceutical experience during the long vacations. In the first year scientific studies comprise chemistry, pharmaceutical biology and human biology in preparation for the more applied pharmaceutical aspects in the second year.

The subject pharmaceutical biology is based on cellular biology and develops to consideration of cell specialisation, as seen by the physiologist, microbiologist and pharmacognosist. A detailed study of the various branches of chemistry in the first year ensures an adequate groundwork on which to build the pharmaceutical applications. Reinforcement in mathematics and biology is provided for those students who require it.

The studies are aimed at improving the written and spoken English of students; at widening both the students' awareness of the implications of their own science by a study of the historical development of medicine and pharmacy, as already stated, and their interests outside their own subject.

Arrangement of the third year subjects is through an elective system, allowing the student to gain some specialist knowledge of a chosen discipline without prejudicing the general requirements for registration as a pharmacist. In the third year are compulsory sociological studies, all students attending lectures on the public health and welfare services.

Staff

Under the head of school, Professor D. A. Norton, B.Sc., F.P.S., F.I.Biol., A.C.T. (Birm.) the director of studies is Mr. J. T. Mearns, B.Sc. (Pharm.), M.Sc., F.P.S. Group heads are:—

PHARMACEUTICAL CHEMISTRY: Dr. L. M. Atherton, B.Sc., Ph.D., F.P.S., F.R.I.C.

PHARMACEUTICAL MICROBIOLOGY: Dr. M. R. W. Brown, M.Sc., Ph.D., F.P.S., M.I.Biol.

PHARMACEUTICS: Professor D. A. Norton (with Mr. J. I. Harris, B.Pharm., F.P.S., as Senior Lecturer).

PHARMACOGNOSY: Dr. R. Hardman, B.Pharm., B.Sc., Ph.D., F.P.S.

PHARMACOLOGY: Professor R. J. Ancill, M.D., Ph.D., F.I.Biol., M.R.C.S.

In all, the opportunity given to students who enrol at the School is, in the words used in the preface to the University's "Development Plan: Report No. 1" of studying at a "University in which purposeful study and research, related to modern needs, can be pursued in surroundings which encourage the full development of the individual."

Teaching Pharmacy for Half a Century

*Portsmouth School's rise
from small beginnings*

F. PERKS, B.Sc., Ph.D., F.P.S., F.R.I.C., D.B.A.

LIKE so many of Britain's academic institutions, Portsmouth College of Technology had a modest beginning. The Technical Institute was founded in 1894, but records show that by 1902, part-time courses were already being offered in chemistry, physics and biological subjects for the examination of the Pharmaceutical Society and first examination of the conjoint Medical Board. Second-year courses included one hour per week of materia medica.

In 1906 Miss E. S. Hooper, B.Sc., Ph.C., was appointed to the chemistry department. She taught chemistry for Part I of the Pharmaceutical Society's examination and provided a course in food and drugs for medical practitioners. About that time the teaching of pharmacy and dispensing as separate subjects was first undertaken, and the Institute was transferred to a new building in Park Road in 1908, now called the Municipal College. A Miss H. Claremont, daughter of Dr. Claremont, Southsea, a student at the time, was later to become the wife of Herbert Skinner (president of the Society, 1927-29).

Part-time

By 1910 a small amount of "physiology and hygiene" was being taught by Dr. Norris, a local medical practitioner. A glance at a prospectus for 1913-14 shows that part-time classes were being offered for the Major and Minor examinations of the Pharmaceutical Society in chemistry, physics, botany and materia medica and also for the Society of Apothecaries' assistants examination. Among the textbooks recommended were Greenish's "Introduction to Materia Medica" and Ince's "Latin Grammar of Pharmacy."

There is little to report of the years of the 1914-18 war, but in 1919 many students whose training had been severely interrupted by that tragic event were returning and requiring training. Accordingly a visit to the College was

paid by Major Saville Peck, (a member of Council of the Pharmaceutical Society) and approval was given for the commencement of full-time courses in pharmacy, one of the stipulations being that a full-time instructor holding the Major qualification should be appointed. The post was filled by Mr. Fred Hemming, Ph.C., later to become the first head of the pharmacy department.

Anniversary

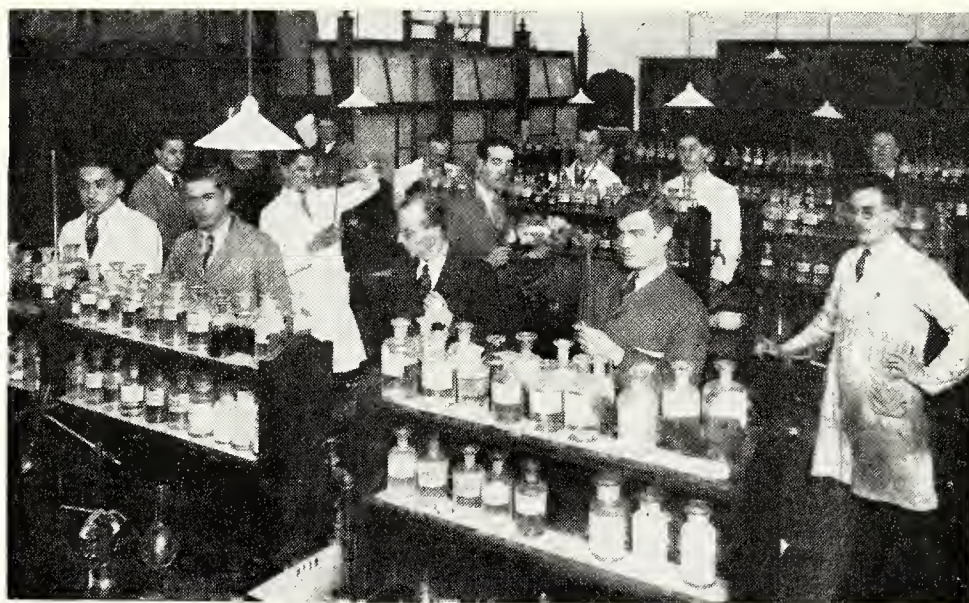
About thirty students registered for the first full-time qualifying course in September 1919, and so, by September 1969, there will have been fifty years of full-time pharmacy teaching in Portsmouth. All the students were trained for the Minor examination (Chemist and Druggist), the first course for the Major qualification (Ph.C.) being held in 1922 for one student, Mr. N. Francis, who was later to be appointed to the staff of the department and to serve the cause of academic pharmacy so well for thirty-seven years until his retirement.



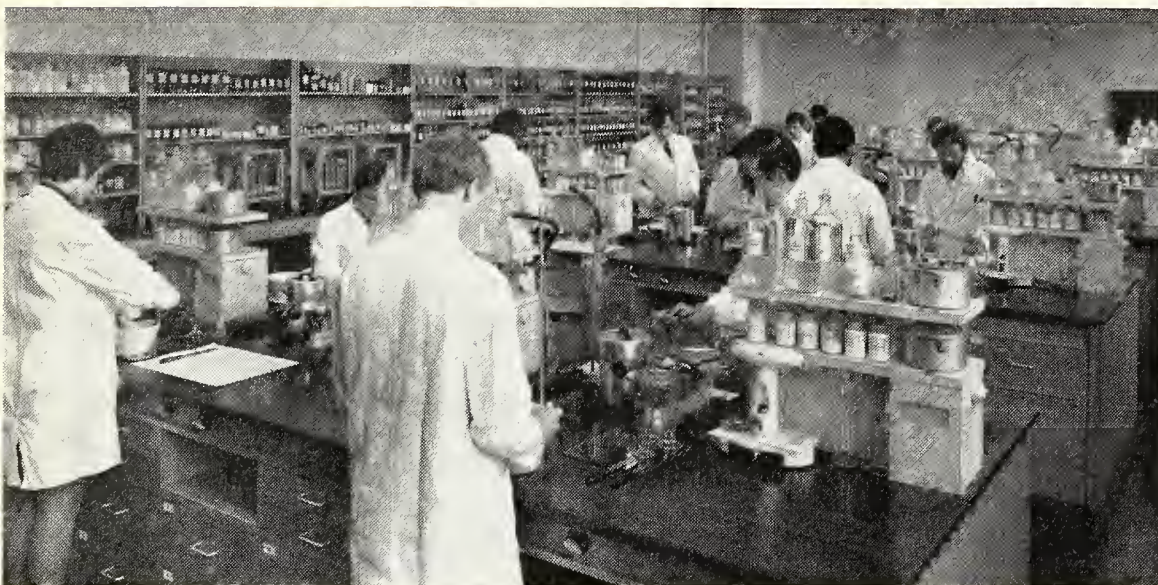
Training for both the Chemist and Druggist and the Ph.C. examinations continued until 1927, with Mr. Hemming in charge of vocational subjects, the chemistry, physics and botany teaching being carried out in the appropriate departments.

Recognition

In 1927 the Department of Pharmacy was formed with Mr. Hemming as head, Mr. Francis as lecturer and Miss M. Wells as demonstrator. The Department was recognised by the Pharmaceutical Society and by the University of London for its B.Pharm. degree. For the next twelve years there appears to have been little change in the composition of the department, about twenty students being enrolled each year. There was apparently some difficulty in obtaining a member of staff to teach physiology from 1937 onwards, for it is recorded that in four years there were four different members of staff teaching the subject, each for one session. For the remainder of the 1939-45 war, physiology teaching was undertaken by



The pharmaceutical chemistry laboratory in 1929.



A view of the dispensary in 1969.

Mr. V. Whittenbury, loaned from Brighton Technical Institute.

New Head

The end of the war found Mr. Hemming still gallantly carrying on but overdue for retirement. In 1946 he was

replaced by Mr. F. H. Oliver, who had previously been a lecturer in the pharmacy department at Birmingham Technical College. Under Mr. Oliver the necessary expansion of teaching staff, laboratories and equipment, long delayed by the war years, began and

was continued by Mr. E. Thorpe who arrived from Aberdeen in 1951 when Mr. Oliver left to become head of the pharmacy department at Sunderland.

Courses were offered for the one-year C. & D. qualification and the two-year Ph.C. diploma during that period, as well as for the two-year London B.Pharm. degree. The next major changes were the disappearance of the one-year, and later the two-year, periods of training, to be replaced by the three-year Ph.C. diploma course and three-year honours B.Pharm. degree.

The arrival of Dr. S. B. Challen as head in 1964 saw a tremendous development in the department. Staff and student numbers increased rapidly and a considerable amount of research was undertaken, the first research assistantships for higher degrees being instituted. With the demise of both the Ph.C and external London B.Pharm. courses the School now runs two full-time, three-year Council for National Academic Awards degree courses, an honours degree with specialisation in pharmaceutical technology and either pharmacology or medicinal chemistry and an ordinary degree with a broad field of instruction in the final year, including pharmaceutical administration and business studies. Success in the ordinary degree permits the graduate to apply for membership of the Institute of Pharmacy Management.

The sudden death of Dr. Challen in May 1967 was a great blow to pharmacy in Portsmouth, but the School continues to flourish with a staff of over thirty and about twenty full-time research assistants. The past year has seen a considerable number of successes among research assistants for both M.Phil. and Ph.D. degrees of London and the C.N.A.A.

In 1968 the vacant headship was filled by Dr. F. Perks who had already been on the teaching staff of the School for twenty-two years.

Expansion

Apart from pharmacy the only department still in the building formerly occupied by the whole College until 1953 is physics, and plans are already being prepared to provide new accommodation for that discipline, thus allowing for further expansion of the Pharmacy School.

It is also hoped that an honours degree in biochemical pharmacology will be run by the School of Pharmacy in the near future.

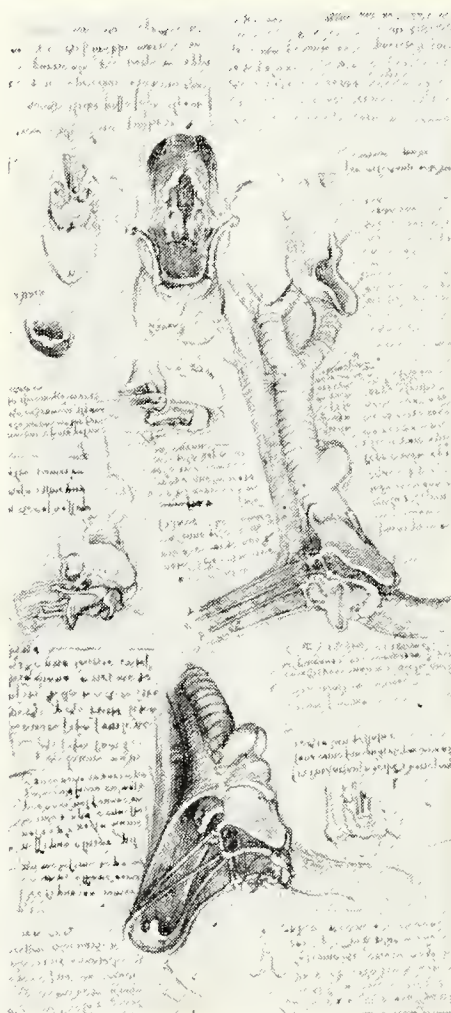
The School has always enjoyed excellent relationships with the local branch of the Pharmaceutical Society and the local Chemists' Association and welcomes the formation of the regional committee. This will enable it to collaborate with pharmacists throughout the area and provide the refresher and revision courses required.

"Geographer" of the Body

DA VINCI AND HIS ANATOMICAL STUDIES

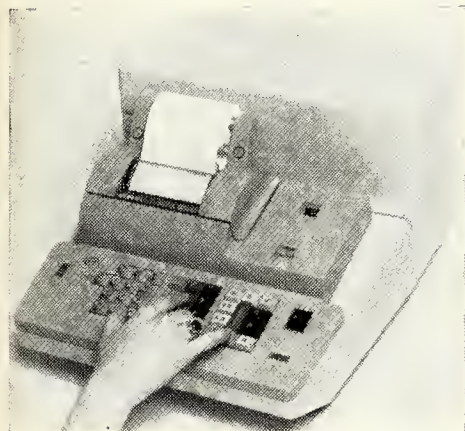
FOR some months to come the scientifically minded no less than the art lovers are being given a unique opportunity to see drawings, by "one of the three or four greatest draughtsmen who ever lived," as Sir Kenneth Clark has called Da Vinci. Lent from the Royal collection at Windsor Castle, nearly 200 are on display at the Queen's Gallery, Buckingham Palace (weekdays 11 a.m. to 5 p.m.; Sundays 2 to 5 p.m.).

At two periods of his life (around 1490 and for five years from 1502) Da Vinci, bent on elucidating the body's mechanisms, made intensive studies of the "geography" of the body. The exhibition contains annotated drawings of nerves, blood vessels, muscles, etc., from one of three books bought by the sculptor Pompeo Leoni after Da Vinci's death (the other two have disappeared). The descriptive captions by Dr. K. D. Keele are of an excellence worthy of the exhibits. The illustration here shown (much reduced) deals with the trachea, oesophagus, thyroid gland, and other parts.



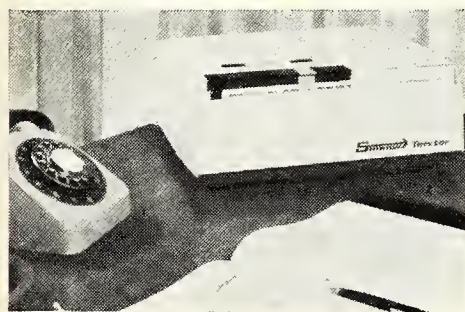
Equipment & Accessories

Electronic Printing Calculator. — A new electronic printing calculator, capable of automatically performing seven individual calculating operations, yet requiring virtually no training to operate, has been introduced by British Olivetti, Ltd., 30 Berkeley Square, Lon-



don, W.I. Called the Logos 328, the machine can automatically perform the following operations: square root, percentages, raising to power, addition, subtraction, multiplication and division. The operator of the Logos can also automatically accumulate up to three results, or store up to three constants simultaneously.

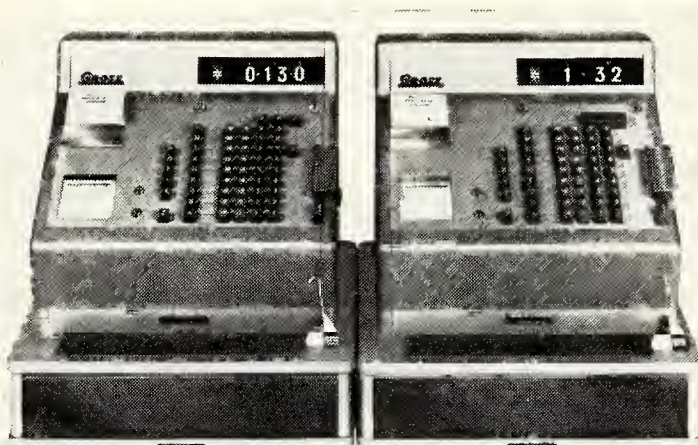
In Two Places at Once. — A problem often facing businessmen is that, the moment the office or shop is closed, the telephone rings. A machine that overcomes the problem is manufactured by Shipton Telstor, Ltd., Smallbrook,



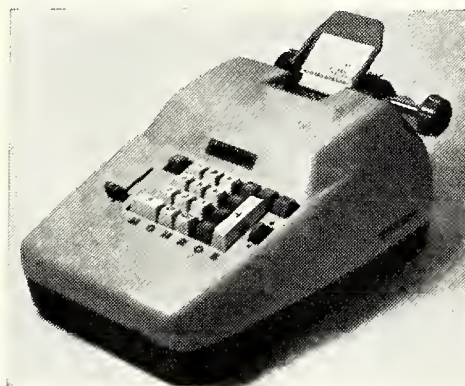
Ringway, Birmingham, 5. It is a telephone answering machine, the Shipton Telstor Interrogator, which, like other telephone answering machines automatically answers the 'phone and records messages, but which obviates the need to return to the premises to play back the tape. That need is overcome by incorporating a device that permits the owner to dial his number and which, after the instrument has recognised a code (known only to the caller), proceeds to play back any recorded messages.

£s.d./Decimal Cash Register. — A patented mechanism enables the Gross Ambassador range of electric cash registers to be changed from £s.d. to decimal working at will by setting simple controls. The £s.d./decimal Ambassador is claimed to be the only machine of its type that works normally in either currency, so differing from "switchable" machines, which can

only calculate the existing currency in shillings and pence. Plans are being made by which all existing Ambassador users can have their machines converted, free of charge, before D-Day on February 15, 1971. Further details from the makers, Gross Cash Registers, Ltd., Hallingbury, Brighton, BN1 8AQ.

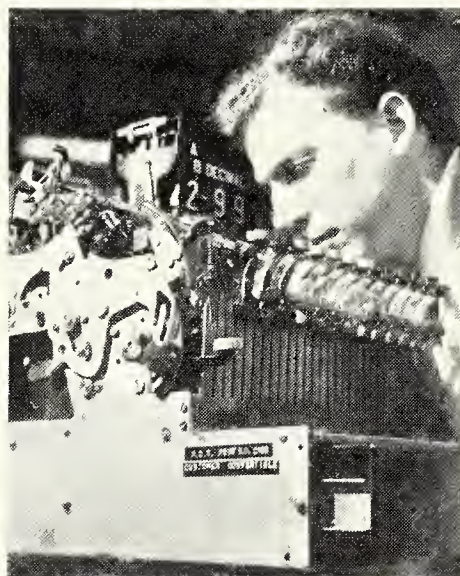


Calculating machine. — For what the makers claim, is fractionally more than the cost of a simple add/listing machine — the new automatic Monroe E116 10-key calculator does routine office addition, subtraction and multi-

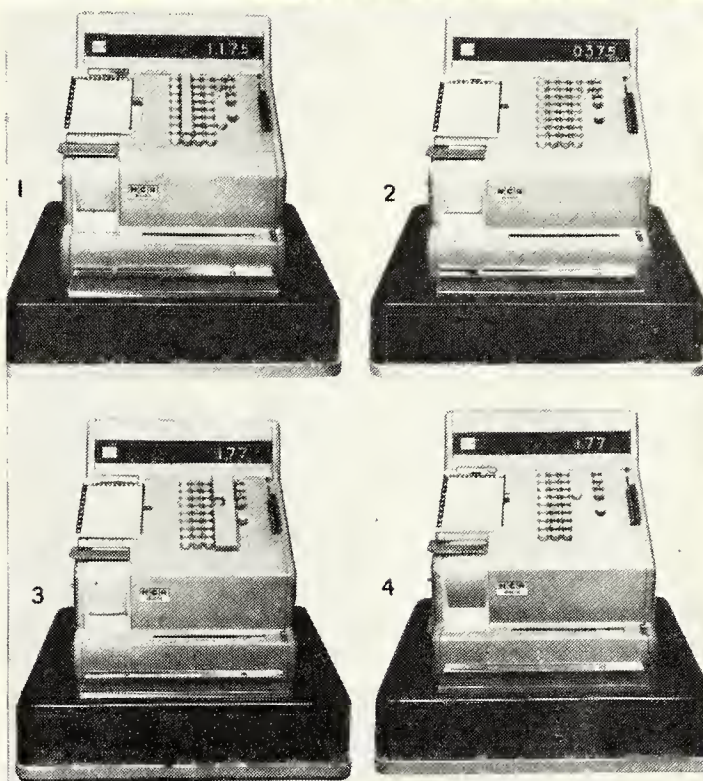


plication all on the same machine, thus saving the expense of extra equipment. Design of the machine is said to reduce hand motion and promote

speed and accuracy. Further particulars from Litton Business Systems, Ltd., Airport House, Purley Way, Croydon.



STAGES IN DECIMALISATION CONVERSION: Most of the electrically operated, itemising machines in the Point Range cash registers produced and marketed by the National Cash Register Co., Ltd., 206 Marylebone Road, London, N.W.1. (Points 21, 3 and 51) can be converted by the user to decimal currency merely by removing a few key top stickers and covering unwanted keys. All machines in the Point Range series sold since 1966 (1), have had the decimal components built-in (so has pre-1966 equipment that has been upgraded to Point Range status), and all of them are eligible for that "instant conversion" at no extra cost. Preparation by a technician before D Day enables the machine to record in shillings and pence only (2). On D Day, or whenever desired, the user covers up the superfluous pence keys and the cash register is ready to record and indicate in £p (3). Later a technician can remove the d. keys entirely (4). The first shipments from Dundee, are now taking place of the company's dual-currency, press-down cash register, the Point SD 100. In the picture above one of the technicians at the company's product development laboratory, is seen working on a prototype of the machine which contains about 1,500 working parts.



Shop Trolleys. — A new double-decked stock replenishing trolley has been produced by Middlehurst, Ltd., 4 Bell Street, Maidenhead, Berks, for use in shops and warehouses. Of steel tube construction stove-enamelled



white, the trolley (model KA/404) can be supplied with wire baskets white nylon-coated to fit either deck. Frame dimension are 28 x 17 in, height 32 in including handle; basket size is 26 x 18 x 12 in. The trolley is fitted with hard rubber or nylon ball-bearing castors. A stock trolley which is also often used as a self-selection unit—that is the Middlehurst. The company's dual-purpose trolley A204 has a flat tray on the bottom tier to hold cartons. Construction is of steel rod and tube and robust. Stove-enamel finish in red or silver is standard, but the unit may also be supplied zinc-plated or plastic-coated white. Length of the trolley is 25 in, width 15½ in and height 34 in.

Plastic Aprons. — A new range of light-weight plastic aprons has been introduced by Welded Plastics, Ltd., 82 Edgeley Lane, London, S.W.4. Inexpensive, practical and effective wear for light industrial or retailing use, the aprons are available in large (46 x



26 in) and medium (40 x 26 in) sizes. They can be wiped over and used again and again, thus saving appreciably on laundry and cleaning costs. There are four standard colours: white, blue, lemon and dark green.



Easier Double Pricing.—A hand-held machine from Norprint, Ltd., Harwich, Essex, simultaneously prints clearly on the same label both decimal and sterling prices in one movement. Even the most inexperienced shop assistant can use the machine with ease, say the makers. The information to be printed is set by means of dials. Once the sterling system becomes obsolete, the dials on the machine may be used



for coding or dating in addition to the decimal price.

Plastic Price Tickets.—Norman Pendred & Co., Ltd., Gladiator Street, London, S.E.29, are supplying dual price tickets printed both sides in black on white plastic to show old and new coinage. They can also supply individual numerals to make up prices up to 9½p in ½p rises also decimal points and £ signs.

Conveying Fragile Products. — Numec, Ltd., New Whittington, Chesterfield, Derbys, market under the Corra-Trough trade mark, a new white PVC belting with corrugated sides that is non-toxic, oil- and fat-resistant. The new belting is designed for use on conveyors, to handle powders, granular materials, pills, capsules, and other fragile formations without spillage or breakage on either horizontal or inclined conveyors. Material can be fed on to the conveyor from a height of as little as 12 in from floor level and elevated to any desired height at angles of up to 70° from the horizontal. Cleats of the same material as the belting can be fitted, so as to prevent roll-back of the products on inclined conveyors. The belting is available in 6 in to 24 in widths, with 2 in corrugated sides.

MANUFACTURERS' ACTIVITIES

Hosts to Local Branch.—The Pharmaceuticals Division of Imperial Chemical Industries Ltd., acted as hosts at Alderley Park, Macclesfield, Ches., recently to the Stockport Branch of the Pharmaceutical Society who assembled to hear a talk on the World Health Organisation given by Dr. T. D. Whittet (chief pharmacist, Department of Health and Social Security).

Golf Tournaments.—The Agfacolor film golf tournament is being held this year at Stoke Poges from May 22-24. The prize money totals £4,250 with a £750 cheque going to the winner. The tournament is again a qualifying event for the Alcan Golfer of the Year championship at Portland, Oregon, U.S.A.

Septuagenarians All.—Mr. L. G. Hambreks, the County Chemical Co., Ltd.'s chief chemist, joined the company in April 1919 and thus has been with the business fifty years. Among many achievements, Mr. Hambreks has created one of the world's leading men's hair dressing: Chemico household cleanser; Chemico valve grinding paste; and more recently G.P. General Purpose Cleaner. Mr. Hambreks, now

in his seventies, still personally checks the company's products. Mr. Lawrence C. Hill (the company's chairman), joined the family business in 1920. Another septuagenarian is M. R. Dendauw, managing director of Hildenco (Chemico's associate in Belgium).

Progress of Irish Company.—Details of the progress of Constant Chemicals, Ltd., Chapelizod, Dublin, since its formation in 1957, were given at a reception in Dublin, recently, when more than sixty senior hospital and dispensary pharmacists heard the managing director (Mr. T. W. Wardell), and sales director (Mr. D. O'Brien) outline the company's history. Its payroll now numbers more than 100. Mr. O'Brien explained that the company had the exclusive handling in Ireland of all the antibiotics of Bristol-Myers International Division. In the group were three companies—Constant Laboratories, dealing with export activities; Aerosols, Ltd., an aerosol contract-filling organisation; and Constant Chemicals, which dealt solely in the Irish market. Aerosols, Ltd., export 30 per cent. of its total production.

PACKAGING NOTES

No Change-parts.—A feature of the automatic cap tightening machine of Newman Labelling Machines, Ltd., 25 Queens Road, Barnet, Herts, is that it has no change-parts. Cap sizes 6-100 mm diameter and containers 2-12 in high can be accommodated.

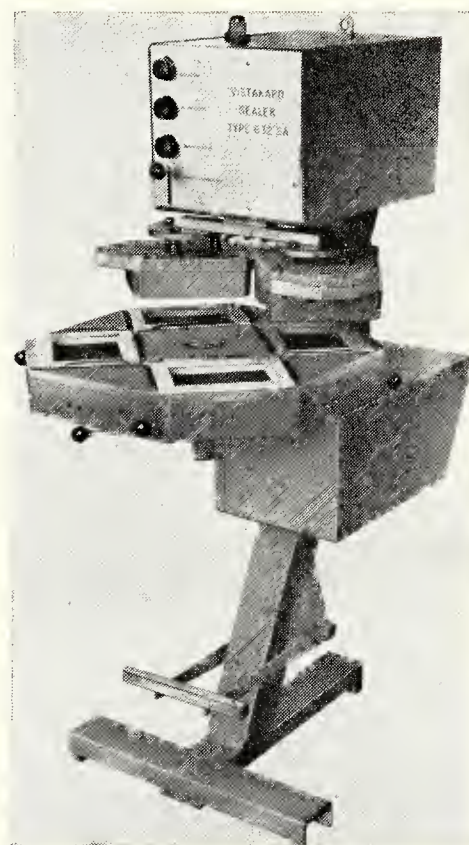
Larger Figures on Standard Labels.—Norprint, Ltd., Horncastle Road, Boston, Lincs, have introduced a new marking machine to give bigger pricing on standard-size labels. The Precision pricer is a hand-held machine equipped to print in both sterling and decimal currencies in a new large type face. It is claimed easy to use even by the most inexperienced shop assistant, at the squeeze of a trigger handle the price required being printed distinctly on a self-adhesive label and applied to the product in one stroking movement. The machine is available in a five-wheel version, and detail to be printed is set by moving the dials on the side of the machine. Dates and codes as well as prices are easily printed. Labels, supplied in ready-to-use reels of 1,250, are available in a variety of colours or pre-printed with company name and address.

High-speed Tablet Counter.—Recently introduced by C. E. King & Sons, Ltd., 41 London Street, Chertsey, Surrey, is model SC6 high-speed mechanical tablet-counting machine for handling all types of tablets, dragees and capsules. Tablets are loaded into a hopper at the rear of the machine in bulk quantities. The hopper is mounted directly on to the counting slats. As the slats move through the tablets, each hole in the slat picks up a tablet and a vibratory bar mounted underneath assists in a clear and positive pick-up. When the filled slats reach the head mechanism the tablets fall through six outlets. As soon as a predetermined quantity of slats has passed the head and the first batch of tablets is completed, the next batch is channelled down the rear six funnels, thus permitting the machine to be continuous in operation. Main advantages claimed for the machine include non-contamination (no blind corners or tablet traps);

cleanliness (subassemblies all removable); check count (large visual area); high speed (9,000 tablets a minute at 12.5 mm, 40,000 tablets a minute at 5 mm); dust collection (vacuum pump removes dust at three points), and low packaging costs per container. A model SC12 operates at twice the speed of the SC6.

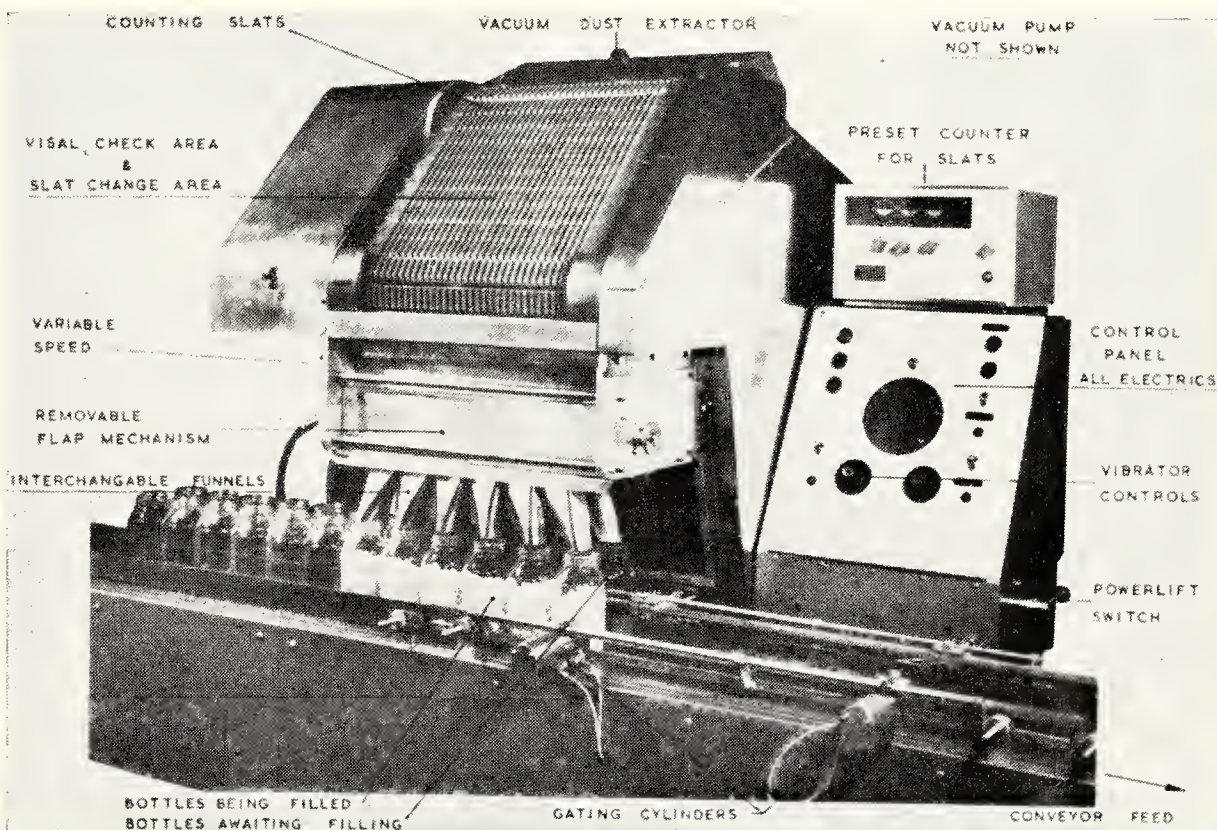
More Plastics in Packaging? — By 1975, plastics can be expected to account for 16-18 per cent. of the total bill for packaging materials, said Mr. N. D. McLeod (deputy chairman and general manager (films), I.C.I. (Plastics Division) in London recently. At present, plastics represent about 10 per cent. in the converted form. Mr. McLeod was speaking at an exhibition put on by the company under the title "Plastics for Packaging." A period was being entered he continued, in which the basic cost of many goods was lower than the cost of their distribution and handling. In packaging today there was a surprising tendency towards unnecessary duplication of protective properties in inner pack, overwrap, display carton and outer container. "I expect to see some rationalisation here. If an inner carton is sufficiently rigid to withstand loading, a load-bearing outer container is superfluous; all that is required is some form of weather and dirt protection," he added.

New Carded-pack Sealer. — Shirley Box Co., Ltd. (the new name of the former Shirley and Warbey Box Co., Ltd.), Christchurch Road, London, S.W.19, have extended their Vistakard range of carded-pack machines with a model 632 SA, priced at £950. The model accepts a larger maximum card size (examples 8 x 8 in, 9 x 7 in, 12 x 4 in) than its predecessors, with a depth of product up to 2 in. The



New model 632SA in the Vistakard range of Shirley Box Co. Ltd.

window can be up to a size 2 in. less than the measurement of the finished card. On a single shift working, one operator can produce up to 1 million units a year. An automatic timing mechanism is included. The Vistakard system is particularly effective, say the makers, where a carded pack having "something extra" is required, for example cosmetics packaging. There are already in the range of Messrs. Shirley Box two smaller models, priced at £495 and £375.



Mechanical slat counting machine SC6 of C. E. King & Sons, Ltd.

TRADE REPORT

The prices given are those obtained by importers or manufacturers for bulk quantities or original packages. Various charges have to be added whereby values are augmented before wholesale dealers receive the goods into stock.

LONDON, MAY 14: The unsettled state of international currencies which prevailed for most of the week caused sterling to be under pressure and buyers were not prepared to commit themselves in forward purchases especially for those items requiring settlement in American dollars. Among CRUDE DRUGS Cape ALOES was 10s. cwt lower on the spot while the Curaçao variety was dearer by 10s. CASCARA was reported to be short on the spot and prices moved up to 10s. cwt although shipment rates were unaltered. In GINGERS Sierra Leone was reported sold at 505s. cwt, c.i.f. Costa Rican IPECACUANHA supplies appeared to have been taken up on the spot and shipment was firmer. Forward rates of West Indian NUTMEGS were fractionally easier but PEPPER was dearer. QUILLAIA was 10s. cwt up on the spot with shipment still not offering. New crop Tinnevely SENNA LEAVES are expected to be in reasonable good supply at origin by the end of May but a less hopeful outlook is forecast for the PODS. Shipments from the port of Tuticorin during April were as follows:—

	U.K.	U.S.A.	Europe
	Tons	Tons	Tons
SENNA LEAVES	—	27	252
PODS	—	—	—

In ESSENTIAL OILS the easier tone noted recently for PATCHOULI continued. Chinese CITRONELLA and Brazilian PEPPERMINT were dearer.

Pharmaceutical Chemicals

ALOID.—50-kg lots, 91s. 6d. kg.

AMMONIUM ACETATE.—Kegs (50 kg), B.P.C. 1949, 7s. 3d. kg. SOLUTION (200 kg drums) strong, 2s. 3½d. kg.

AMMONIUM BICARBONATE.—B.P. powder £54 10s. per ton; CARBONATE, £83 10s. for lump and £87 10s. for powder.

AMMONIUM CHLORIDE.—50 kg lots pure powder, 2s. 5½d. kg in paper sacks.

ANTIMONY.—TRICHLORIDE, flake, in 25 kg drums about 15s. kg; POTASSIUM, TARTRATE, U.S.P., 9s. 6d. lb.

ATROPINE.—(Per kg for 500-g lots): ALKALOID and METHONITRATE, 1,200s.; METHYLBROMIDE, 1,183s.; SULPHATE, 970s.

BACITRACIN.—U.S.P., 75s. per mega unit.

BEMEGRIDE.—B.P.C. 320s. kg.

BENZAMINE LACTATE.—In 500-g lots 1,023s. per kg.

BROMIDES.—Crystals (per kg):—

	Under 50 kg	50 kg	250 kg
	s. d.	s. d.	s. d.
POTASSIUM*	6 5	5 10½	5 8
SODIUM	6 5	5 10½	5 8
AMMONIUM	7 4	6 9½	6 6

*Powder 4d. kg more.

CAFFEINE.—HYDRATE and ANHYDROUS in less than 50 kg lots, 32s. 9d. kg; over 50 kg, 30s. 3d.

CALCIUM CARBONATE.—B.P. light precipitated powder, 1-ton lots, £47 10s. per ton in free bags, delivered. PREPARED powder, £22 10s. ex works.

CALCIUM CHLORIDE.—Fused, 437s. 8d. per 100-kg in 12½-kg tins.

CALCIUM GLUCONATE.—(Per kg), 25-kg, 10s. 4d.; 50-kg, 9s. 9d.; 250-kg 9s. 5d.

CALCIUM LACTATE.—B.P. 250-kg lots at £412 per 1,000 kg.

CANTHARIDIN.—£75 per 100 g.

CHLORAL HYDRATE.—1-cwt 4s. 8d. per lb.

CHLORPHENESIN.—50 kilo lots 72s. 6d. kg.

CINCHOCAINE.—HYDROCHLORIDE, 850s. kg.

CORTISONE.—1-kg lots. ACETATE, 4s. 6d.; HYDROCORTISONE ACETATE OR ALCOHOL, 4s. 6d. per g.

DIENESTROL.—B.P. is 1s. 3d. per g for 5-kg lots.

DIGOXIN.—100-g lots are 40s. per g.

DITHRANOL.—B.P., 330s. per kg, for 5-kg lots.

EMETINE.—HYDROCHLORIDE, £450 kg.

EPHEDRINE.—HYDROCHLORIDE, 4s. 9d. per oz for 1,000-oz lots. METHYL derivative, 425s. kg.

ERGOMETRINE.—MALEATE, B.P., 144s. per g for 5-g lots; 10-g, 138s. g.

GLUCOSE.—(Per ton) MONOHYDRATE, B.P. powder, £76; ANHYDROUS, £48 10s.; LIQUID, 43° Baumé, £59 10s. (5-drum lots).

GLYCERIN.—B.P. grade, per cwt:—

	Over 25 tons	5 tons and under 25 tons	1 ton and under 5 tons	Under 1 ton
	s. d.	s. d.	s. d.	s. d.
5-cwt drums	245 0	247 0	250 0	256 0
2½-cwt "	248 0	250 0	253 0	259 0
56-lb tins	252 0	254 0	257 0	263 0
28-lb "	274 0	276 0	281 0	290 0
14-lb "	278 0	280 0	285 0	294 0

Bulk tank wagon loads from 241s. to 242s. 6d. Technical grade, less 5s. cwt.

GLYCEROPHOSPHATES.—Per kg in 50-kg lots; CALCIUM, B.P.C. 29s. 6d.; IRON, 37s. 10d.; MAGNESIUM, 39s. 11d.; MANGANESE, 57s. 5d.; POTASSIUM, 50 per cent., B.P.C., 9s. 8d.; SODIUM, 50 per cent., B.P.C., 6s. 11d. and powder, B.P.C., 1949, 22s. 10d.; GLYCEROPHOSPHORIC ACID, 20 per cent., 12s.

HEXAMINE.—B.P.C. 1959, 50-kg lots are 6s. per kg.

HYDROQUINONE.—1-cwt lots, 10s. per lb. 1-ton, 8s. 6d.

HYOSCYAMINE SULPHATE.—1-kg lots, 1,357s.

HYPOPHOSPHITES.—Per kg:—

Quantity	5 kg	12.5 kg	50 kg
	s. d.	s. d.	s. d.
CALCIUM, B.P.C.	21 8	17 10	16 7
IRON, B.P.C.	39 3	38 0	36 9
MANGANESE, B.P.C.	—	37 2	36 0
POTASSIUM, B.P.C.	27 1	24 9	23 6
SODIUM, B.P.C.	—	20 1	18 10

IODOFORM.—(per kg) powder, 50 kg, 64s. 6d.; crystals, 6s. 6d. more.

ISOPRENALINE SULPHATE 5-kg, 273s. kg.

KAOLIN.—Light, 500-kg, 1s. 3d. kg and 1,000 kg, 1s. 2d.

LITHIUM SALTS.—In 1 cwt lots, CARBONATE 5s. 9d. lb; CHLORIDE granular, 10s. 1d. powder 10s. 2½d.; HYDROXIDE, 6s. 5½d.

NEOMYCIN SULPHATE, B.P.—5-kg, 550s. kg sterile and non-sterile.

MERCUROCHROME.—145s. 4d. per kg.

MERCURY SALTS.—Per kg for under 50-kg lots—AMMONIATED powder, 168s.; PERCHLORIDE, 145s.; SUBCHLORIDE, 171s. OXIDES, yellow, 177s. and red, 182s. IODIDE (25-kg lots), 122s.

MERSALYL.—ACID, 283s. per kg; SODIUM, 380s.

METHYL SALICYLATE.—250-kg, 8s. 5½d. kg.

PARACETAMOL.—250-kg, 21s. 10½d. kg.

PENICILLIN.—SODIUM, POTASSIUM OR PROCAINE, 2,25d. per Mu. for 5,000 Mu.

PHENACETIN.—B.P. 1,000 kg, 13s. 11½d. kg.

PHENAZONE.—1-cwt lots, 9s. 6d. per lb.

PHENOLPHTHALEIN.—1-cwt, 9s. per lb.

PIPERAZINE.—Less than 50 kg are: ADIPATE, 19s. 3d. per kg; CITRATE, 18s. 6d.; HEXAHYDRATE, 13s. 3d.; PHOSPHATE, 20s. 6d.; TARTRATE, 19s. 6d.

PREDNISOLONE.—ALCOHOL and ACETATE from 7s. per g.

PREDNISONE.—1 kg lots, ALCOHOL and ACETATE, 6s. 6d. per g.

QUINIDINE.—SULPHATE, 14s. 4d. per oz for 1,000-oz lots. ALKALOID, 17s. oz (500-oz).

QUININE.—In 1,000-oz lots (per oz). SULPHATE, 7s. 8d.; HYDROCHLORIDE, 9s. 5d.; BISULPHATE,

7s. 7d.; DIHYDROCHLORIDE, 10s. 1d.; ALKALOID, 10s.; HYDROBROMIDE, (500-oz lots), 10s. 3d.

SALICYLAMIDE.—250-kg, 13s. 3½d. per kg.

SODIUM ACETATE.—B.P.C. 1949, 50 kg 4s. 0½d. kg.

SODIUM BENZOATE.—1 ton lots, 2s. 5d. lb.

SODIUM BICARBONATE.—B.P. £24 8s. per ton for 8-ton lots in 1-cwt bags.

SODIUM CHLORIDE.—Vacuum dried, 179s. 4d. per ton in paper sacks for 6-ton lots.

SODIUM CYCLAMATE.—1 ton lots, 4s. lb.

SODIUM FLUORIDE.—B.P.C., 50-kg kegs, 10s. 4d. kg.

SODIUM FORMATE.—B.P.C. 1934, 6s. 8d. kg for 50-kg.

SODIUM GLUCONATE.—Pyrogen-free 500-g, £12 per kg; refined 150 kg, 8s. 9d. kg.

SODIUM METABISULPHITE.—Powder 1s. 11d. kg in 50-kg sack.

SODIUM NITRITE.—B.P.C., 50-kg kegs, 6s. 2d. per kg.

SODIUM PERBORATE.—(Per ton) TETRAHYDRATE (minimum 10 per cent. available oxygen), £144 8s. in 1-cwt kegs; £136 18s. in 1-cwt bags; PERBORATE MONOHYDRATE (15 per cent. available oxygen) is £313 4s.

SODIUM PERCARBONATE.—(Per ton), £173 15s. in kegs (bags £7 10s. per ton lower) for minimum 12 per cent. available oxygen.

SODIUM PHOSPHATE.—B.P. ACID crystal, 6s. 3d. kg; POWDER, 8s. 1d.

SODIUM POTASSIUM TARTRATE.—B.P.C. (Per 1,000-kg), 50-kg, £267; 250-kg, £258.

SODIUM SALICYLATE.—1-ton lots in bulk, 3s. 10½d. per lb.

SODIUM SULPHATE.—B.P. £36 5s. to £38 10s. per ton as to crystal. B.P. exsiccated £58 10s. ton (5-cwt lots).

SODIUM SULPHITE.—4-ton lots; photo quality, £31 12s. 6d. per ton in bags.

SODIUM THIOSULPHATE.—In 4-ton lots £38 12s. 6d. per ton ex works

THEOBROMINE.—ALKALOID from 25s. 11d. per kg, c.i.f.

THEOPHYLLINE.—50-kg lots and over: B.P., 37s. 3d. per kg; HYDRATE, B.P., 36s. 3d. and AMINOPHYLLINE, 36s. 3d. per kg.

UREA.—B.P., £57 ton; technical, £38.

Crude Drugs

ALOES.—(per cwt)—Cape primes, 320s. spot; 295s., c.i.f. Curacao, 560s. spot; 550s. c.i.f.

CAMPOR.—B.P. powder, 43s. kg; 40s. c.i.f.

CASCARA.—Spot, 310s. cwt; 280s., c.i.f.

GINGER.—Per cwt, Nigerian, peeled, 450s., spot, and c.i.f.; split, 460s.; 450s., c.i.f. Jamaican No. 3, 650s. Sierra Leone reported sold at 505s., c.i.f.

IPECACUANHA.—(Per lb)—Matto Grosso, spot, nominal; 52s. 6d., c.i.f.; Costa Rican, spot, nominal; 65s., c.i.f.

NUTMEGS.—(Per lb, c.i.f.)—West Indian 80's, 5s. 7d.; 110's, 5s. 3d.; defectives, 3s. 4d.

SEEDS.—(Per cwt).—ANISE.—China star unselected, 230s.; Spanish, 265s., both duty paid.

CARAWAY.—Dutch, 182s. 6d. spot. CELERY.—Indian, May-June shipment, 345s., c.i.f. paid; new crop, 325s., c.i.f. CORIANDER.—Moroccan, 70s., spot; new crop, 69s., c.i.f. CUMIN.—Iranian, 195s., duty paid; shipment, 147s. 6d., c.i.f.

DILL.—Indian, 165s., spot; 145s., c.i.f. Chinese, 115s., duty paid; 95s., c.i.f. FENNEL.—Chinese, 110s., duty paid; 90s., c.i.f. FENUGREEK.—Moroccan, 71s., duty paid; 90s., c.i.f. MUSTARD.—English, 57s. 6d. to 87s. 6d. as to quality.

Essential and Expressed Oils

CITRONELLA.—Ceylon, 8s. 6d. per lb, spot; 8s. c.i.f.; Formosan, 6s. 3d., duty paid; 6s. 6d. c.i.f.; Chinese, 5s. 3d., in bond; 5s. 3d. c.i.f.

PATCHOULI.—Spot, 25s. to 26s. per lb, duty paid; shipment, 21s. to 23s. 6d., c.i.f.

PEPPERMINT.—(Per lb) *Arvensis*: Chinese, 10s. 9d. spot; 10s. 6d., c.i.f. Brazilian, 10s. 9d., spot and c.i.f. American *Piperita*, 40s. to 60s., Italian, 95s.

CONTEMPORARY THEMES

Subjects of contributions in current medical and technical publications.

IPECAC SYRUP in acute poisoning in children. *Practitioner*, May, p. 666.

A MALE-ORIENTATED FERTILITY CONTROL EXPERIMENT. *Practitioner*, May, p. 677.

LIQUIDS AND SEMI-SOLIDS. The bulk compound technology of. *Amer. J. hosp. Pharm.*, February, p. 70.

DIMETHYL SULPHOXIDE. The effects of in lowering electrical skin resistance. *Amer. J. hosp. Pharm.*, February, p. 120.

VITAMIN A ACID for dermatoses and psoriasis. *J. Amer. med. Ass.*, March 10, p. 1863.

ORAL CONTRACEPTIVE AGENTS and the cervix. *J. Amer. med. Ass.*, March 24, p. 2243.

COMBINED LIVE MEASLES, MUMPS AND RUBELLA VIRUS VACCINES. *J. Amer. med. Ass.*, March 24, p. 2259.

ANTICOAGULANTS THERAPY after myocardial infarction. *J. Amer. med. Ass.*, March 24, p. 2263.

P-BENZOQUINONEOIMINE — A vital intermediate in oxidative hair dyeing. *J. Soc. cosm. Chem.*, April, p. 253.

MARIHUANA. Acute effects of, on speech. *Nature*, May 3, p. 432.

VITAMIN D₃ and its polar metabolites. Long half-life of, in human serum. *Nature*, May 3, p. 482.

ORAL CONTRACEPTIVES and plasma amino-acids. *Nature*, May 3, p. 487.

ESSENTIAL OILS OF HAITI. *Soap, Perf. Cosm.*, April, p. 265.

Polyvalent immunising agents and methods for their production. Parke, Davis & Co. 1,155,683. Method of producing anti-toxins. Immune Milk Co., of America, Inc. 1,155,730.

Process of preparing pure lysozyme. Spa-Soc. Prodetti Antibiotici, S.p.A. 1,155,792.

Process for the recovery and purification of lysozyme. Spa-Soc Prodetti Antibiotici, S.p.A. 1,155,793.

British patent specifications relating to the above will be obtainable (price 4s. 6d. each) from the Patents Office, 25 Southampton Buildings, London, W.C.2, from June 18.

Trade Marks

THE Harriet Hubbard Ayer trade-mark (for cosmetics) which was owned for the whole of the American Continent by a subsidiary of the Standard Metals Corporation, has been acquired by a Dutch subsidiary of Unilever, and Unilever companies now own the trade-mark all over the world.

APPLICATIONS ADVERTISED BEFORE REGISTRATION

"Trade Marks Journal," May 7, No. 4732

CELLOBIOTON, 883,801, by Collaforte (Edware), Ltd., Edware, Middlesex. For hair tonics (3)

MARY QUANT, B894,675, by Mary Quant Cosmetics, Ltd., Surbiton, Surrey. For non-medicated toilet preparations; cosmetic preparations, soaps, perfumes, preparations for the teeth and hair and toilet articles (3)

EYLURE EYLIGHT, 914,384, by Eylure, Ltd., Welwyn Garden City, Herts. For non-medicated toilet preparations, and cosmetics, all for the eyes (3)

BEL ARGENT, B925,293, by Laboratoires Roja, Nanterre, (Seine), France. For preparations for the hair, but not including colouring preparations (3)

COTY BELLISSIMA, 928,054, by Coty (England), Ltd., London, W.1. For perfumes, eau-de-Cologne, non-medicated toilet preparations, cosmetics and perfumed soap (3)

DE-NE-NES, 929,234, by Antonio Puig, S.A. Barcelona, Spain. For soaps, non-medicated toilet preparations, cosmetics, perfumes, dentifrices, preparations for the hair and toilet articles (3)

HORNET, 930,608, by Reckitt & Sons, Ltd., Hull, Yorks. For perfumes, toilet preparations (not medicated), cosmetic preparations, dentifrices, depilatory preparations, preparations for dressing and setting the hair, soaps and essential oils, all being for sale in the United Kingdom, otherwise than for export, but not excluding goods for export to the Irish Republic (3)

STO, 894,591, by St. Olam Kennels, Ltd., Luton, Beds. For pharmaceutical, veterinary and sanitary substances; and disinfectants (5)

SWITSAL, 911,453, by Intec Proprietaries, Ltd., Morden, Surrey. For medical preparations for the scalp, body and feet, and anti-perspirants; all for external use; disinfectants and room deodorants (5)

ULSACARB, B912,931, by Galen, Ltd., Portadown, County Armagh, N. Ireland. For pharmaceutical antacid preparations and substances (5)

SOL, B916,331, by Scholl Mfg. Co., Ltd., London, E.C.1. For pharmaceutical preparations and substances, none being in liquid form; medicated and surgical plasters; bandages and medicated pads, all for the feet and medicated socks (insides) (5)

HIPREI, 920,479, by Rexall, Drug and Chemical Co., Los Angeles, California, U.S.A., For medical preparations (5)

PHARMISERINE, B922,113, by Societa Farmaceutica Italia, Milan, Italy. For pharmaceutical antibiotic preparations containing cycloserine (5)

VERAFEM, 926,608, by Upjohn, Ltd., Crawley, Sussex. For pharmaceutical preparations for female use (5)

ALSERA, B928,179, by Wellcome Foundation, Ltd., London, N.W.1. For human and veterinary use (5)

STUGERON, 928,567, by Janssen Pharmaceutica, N.V., Beerse, Belgium. For pharmaceutical preparations (5)

UNIGEST, by Unigreg, Ltd., London, S.W.19. For pharmaceutical preparations for the treatment of acidity and flatulence, none containing or produced from milk (5)

UNIHEPA, 930,028, by Unigreg, Ltd., London, S.W.19. For pharmaceutical preparations and substances, all for use in the treatment of liver conditions (5)

GOLDEN BABE, 929,770, by Lilia-White (Sales), Ltd., Saltley, Birmingham, 8. For napkin liners made of paper, for babies (16)

Coming Events

Items for inclusion under this heading should be sent in time to reach the Editor not later than first post on Wednesday of the week of insertion.

Monday, May 19

ENFIELD CHEMISTS' ASSOCIATION, Wheatsheaf hotel, Baker Street, Enfield, at 7.45 p.m. Annual meeting and members' photographic slides.

LEICESTER AND LEICESTERSHIRE BRANCH, PHARMACEUTICAL SOCIETY, Postgraduate medical centre, Leicester, at 8 p.m. Dr. B. Northover (principal lecturer in pharmaceutical chemistry, Leicester School of Pharmacy) on "Drug Interactions."

ROMFORD BRANCH, PHARMACEUTICAL SOCIETY, Golden Lion hotel, Romford, at 7.45 p.m. Speaker: Mr. A. Chaney (National Association for the Welfare of Children in Hospital). (Replaces meeting arranged for May 26.)

SCOTTISH PHARMACEUTICAL FEDERATION, Trades House of Glasgow, Glassford Street, Glasgow, C.1, at 8 p.m. Regional branch meeting. Mr. H. C. Watkins (chief marketing executive, N.P.U. Marketing, Ltd.) on "The Marketing Force that Really Works for Private Pharmacy."

UNIVERSITY OF LONDON, Wright-Fleming Institute, St. Mary's Hospital Medical School, London, W.2, at 5 p.m. Sir Peter Medawar (National Institute for Medical Research) on "Antilymphocyte Serum."

WEST KENT BRANCH, PHARMACEUTICAL SOCIETY, Bull's Head hotel, Chislehurst, at 8 p.m. Annual meeting, followed by Mrs. I. M. Z. Elliott, (president, National Association of Women Pharmacists) on "Women Pharmacists."

Tuesday, May 20

BIRMINGHAM BRANCH, NATIONAL PHARMACEUTICAL UNION, Chamber of Commerce, Harborne Road, Birmingham, at 7.45 p.m. Annual meeting.

EAST METROPOLITAN BRANCH, PHARMACEUTICAL SOCIETY, Queen Elizabeth Hospital for Children, Hackney Road, London, E.2, at 8 p.m. Dr. R. J. K. Brown on "Usage of Drugs in Paediatrics."

EDINBURGH BRANCH, SCOTTISH PHARMACEUTICAL FEDERATION, Roxburgh hotel, Charlotte Square, Edinburgh, at 7.45 p.m. Mr. H. C. Watkins (chief marketing executive, N.P.U. Marketing, Ltd.) on "The Marketing Force that Really Works for Private Pharmacy."

THANET BRANCH, PHARMACEUTICAL SOCIETY, Endcliffe hotel, Cliftonville, at 7.45 p.m. Film evening arranged by Pfizer, Ltd.

WEST MIDDLESEX CHEMISTS' ASSOCIATION, Park hotel, Greenford Avenue, Hanwell, at 8 p.m. "Any Questions?" Panel: Messrs. L. Priest, S. Simons and J. A. Stewart.

Wednesday, May 21

BOURNEMOUTH BRANCH, PHARMACEUTICAL SOCIETY, Medical centre, Boscombe, at 1.15 p.m. Mr. T. C. Nosworthy on "Is Your Sick Note Really Necessary?—the Doctor's Dilemma." At main committee room, New Hospital, Poole, at 1.15 p.m. Dr. G. H. Tovey on "Rh Immunisation."

PERTH BRANCH, SCOTTISH PHARMACEUTICAL FEDERATION, Queen's hotel, Nethergate, Dundee, at 7.45 p.m. Mr. H. C. Watkins (chief marketing executive, N.P.U. Marketing, Ltd.) on "The Marketing Force that Really Works for Private Pharmacy."

PHARMACEUTICAL SOCIETY OF GREAT BRITAIN, Connaught rooms, Great Queen Street, London, W.C.2, at 7.30 p.m. Annual meeting.

Thursday, May 22

ABERDEEN BRANCH, SCOTTISH PHARMACEUTICAL FEDERATION, Tree Tops hotel, Springfield Road, Aberdeen, at 7.45 p.m. Mr. H. C. Watkins (chief marketing executive, N.P.U. Marketing, Ltd.) on "The Marketing Force that Really Works for Private Pharmacy."

PHARMACEUTICAL SOCIETY OF GREAT BRITAIN, Connaught rooms, Great Queen Street, London, W.C.2, at 9.30 a.m. Branch Representatives' meeting.

CONFERENCE INFORMATION

The ladies' excursion to the Ulster Weaving Co. is now fully booked and no more applications can be accepted.

Patents

COMPLETE SPECIFICATIONS ACCEPTED

From the "Official Journal (Patents)," May 7, 1969

Substituted benzoic acid lactones having estrogenic properties. Commercial Solvents Corporation. 1,155,066.

2-(p-Alkoxyphenyl)-3-substituted indoles. Upjohn Co. 1,155,109.

Bovine vibriosis vaccine. Colorado State University Research Foundation. 1,155,112.

Substituted indoles and the manufacture thereof. Upjohn Co. 1,155,193.

Indole derivatives and the manufacture thereof. Upjohn Co. 1,155,194-45.

Compositions containing orally administrable iron salts of carboxyl group-containing polymers. Toikoku Hormone Mfg. Co., Ltd. 1,155,208.

Processes for the preparation of iron salts of carboxyl group-containing polymers. Toikoku Hormone Mfg. Co., Ltd. 1,155,209.

A-norandrostane derivatives. Merck & Co., Inc. 1,155,234.

Substituted benzoic acid lactones having estrogenic properties. Commercial Solvents Corporation. 1,155,255.

Complex quaternary ammonium salts and compositions containing them. Dermal Laboratories, Ltd. 1,155,258.

Selective reduction of steroidal dionones. Merck & Co., Inc. 1,155,280.

Process for increasing the yield of tylosin produced by fermentation of microorganisms. Eli Lilly & Co. 1,155,310.

Diagnostic composition for infectious mononucleosis. Princeton Laboratories. 1,155,315.

Pyridazine derivatives having herbicidal properties. Badische Anilin-&-Soda-Fabrik. 1,155,380.

Polymers from 8-hydroxyquinolines and metal compounds thereof and process for their manufacture. CIBA, Ltd. 1,155,439.

Therapeutic composition for treating skin injuries. H. F. Kamp. 1,155,440.

Derivatives of cephalosporin. Roussel-Uclaf. 1,155,493.

Process for the manufacture of 9 β ,10 α -steroids. F. Hoffman-La Roche & Co., A.G. 1,155,511.

4-oxa-steroids. F. Hoffman-La Roche & Co., A.G. 1,155,512.

3,5-seco-A-nor-steroids. F. Hoffman-La Roche & Co., A.G. 1,155,513.

Process for the preparation of steroid compounds. Ayerst, McKenna & Harrison, Ltd. 1,155,557.

Imidazole derivatives, their preparation and use. J. R. Geigy, A.G. 1,155,580.

Antibacterial fusidic acid derivatives. Løvens Kemiske Fabrik Produktion, A.S. 1,155,626.

PRINT AND PUBLICITY

PRESS ADVERTISING

RADIOL CHEMICALS, LTD., Stepfield, Witham, Essex; Major Press campaigns for Radian B aspirin spirit liniment in national daily and Sunday newspapers and provincial morning and evening newspapers. Mid-May until March 1970. An overseas schedule, using Press, radio and television, will cover sixty world markets.

WRIGHT LAYMAN & UMNEY, LTD., 43 Clapham Road, London, S.W.9: Wright's coal tar soap. Press campaign commencing May 19.



EYE ESSENTIALS KIT: A "winner" in Christmas range of Dorothy Gray, Ltd., Hampden Park, Eastbourne, the Elation Kit shown is now included in the standard range.



DISPLAY MERCHANDISER: Latest display unit for Happy Face by Toni Co., 101 Syon Lane, Great West Road, Isleworth, Middlesex.

N.H.S. STATISTICS

Contractors in WALSALL during December 1968, dispensed 89,983 prescriptions (57,902 forms). Total cost was £45,386, an average of 121.05 d.

In LEICESTER during December 1968, 145,718 prescriptions (93,394 forms) were dispensed. Total cost was £87,134, an average of 143.51 d. per prescription.

In CORNWALL during December 1968, 157,215 prescriptions (102,101 forms) were dispensed. Total costs were £103,241, an average of 157.6 d. per prescription.

WORLD TRADE

South African Chemical Merger Talks.—The possibility is being studied of the formation of a giant chemical public holding company which would acquire the respective equity interests in Bosveld Kunsmis (Pty), Ltd., Chemical Industries of South Africa (Pty), Ltd., Fisons (Pty), Ltd., and Optichem Fertilisers (Pty), Ltd.

Italy Delays New Tax Introduction.

—Italy has advised its associates in the European Economic Community that she does not intend to introduce an added value tax (TVA) by the end of the year (the deadline for the tax's introduction).

France, Germany and the Netherlands have already introduced TVA, and the system will come into operation in Belgium and Luxembourg on January 1, 1970. But the Italian Government recently told the Commission that it needs up to another two years to complete all the necessary parliamentary procedures, and is aiming instead at January 1971. The Commission is to send a letter to the Rome Government calling attention to the problems that this will cause.

NEW COMPANIES

P.C.=Private Company. R.O.=Registered Office.

A. F. MARSHALL, LTD. (P.C.).—Capital: £9,000. To carry on the business of pharmacists, etc. Directors: William W. Hudson, F.P.S. and Alan F. Marshall, M.P.S. R.O.: 3 Fair Road, Wibsey, Bradford.

BANJO (CONFECTIONERY), LTD. (P.C.).—Capital: £100. To carry on the business of manufacturers of confectionery products (medicated and non-medicated), etc. Directors: Albert A. Houghton and Ernest L. Halliwell. R.O.: Barclays Bank Building, Hamilton Road, Slough.

BENSHIRE, LTD. (P.C.).—Capital £100. To carry on the business of manufacturers of and dealers in chemicals, gases, drugs, etc. Subscribers: Muriel Goldstein and Brian Goldstein, 70 Finsbury Pavement, London, E.C.2.

HOUSE OF RUSSELL, LTD. (P.C.).—Cap-

ital: £100. To carry on the business of beauty specialists, etc. Subscribers: J. D. Burridge and D. A. Roberts, 1 Serjeants Inn, London, E.C.4.

LORNSHILL, LTD. (P.C.).—Capital: £100. To carry on the business of wholesale and retail chemists and druggists, etc. Subscribers: Leonard H. Lewis and Francis A. Dean, 12 Norfolk Street, London, W.C.2.

MARNA CHRISTINA, LTD. (P.C.).—Capital: £1,000. To carry on the business of manufacturers and dealers in perfumes, cosmetics, toiletries, etc. Directors: John D. Glover and Hugh R. Duncan. R.O.: Eldon Street House, Eldon Street, London, E.C.2.

MICHAEL EPSTEIN, LTD. (P.C.).—Capital: £1,000. To carry on the business of consulting, analytical, dispensing and manufacturing chemists, etc. Directors: Michael Epstein, M.P.S. and Felicia Epstein. R.O.: 324 Kingsland Road, London, E.8.

R. J. HALL (LONDON), LTD. (P.C.).—Capital: £1,000. Objects: To carry on the business of dealers in photographic and optical equipment, etc. Directors: Reginald J. Hall and Eunice A. Hall. R.O.: 128 High Street, Guildford, Surrey.

SEATON CHEMICAL DEVELOPMENTS, LTD. (P.C.).—To carry on the business of manufacturing, research, dispensing and analytical chemists, etc. Directors: Robert M. T. Kerr, Carl B. Roberts, Gerard Edwards, Alan R. Sutton, Thomas G. Dobson and Dennis Mathewman. R.O.: Northbrook Works, Canal Road, Bradford, 2.

TUMONTE PRODUCTS, LTD. (P.C.).—Capital: £1,000. To carry on the business of manufacturers of and dealers in beauty preparations, etc. Directors: Monty J. Cohen, Frances Cohen, Montague Haberfield and Norma Haberfield. R.O.: 141 Tooley Street, London, S.E.1.

WESSEX PHOTOGRAPHIC, LTD. (P.C.).—Capital: £1,000. Directors: Raymond J. Lye and Raymond A. B. D. Thatcher. R.O.: 8 Hanover Square, London, W.1.

BOOKS RECEIVED

Mention here does not preclude a later review.

The Guilty Madmen of Whitehall. A. G. ELLIOT (foreword by J. ENOCH POWELL M.B.E., M.P.). *Elliott Right Way Books*, Kingswood, Surrey. 7½ x 4½ in. Pp. XIV + 191. 3s. 6d. (paper covers).

Pharmaceutical Chemistry, Part II: Inorganic. Volume I. M. L. SCHROFF. *National Book Centre*, P-76 Dr. Sundari Mohan Avenue, Calcutta-14, India. 8½ x 5½ in. Pp. vi + 700 + xviii. \$10 (U.S.).

Complexometry with EDTA and related reagents. T. S. WEST, D.Sc., Ph.D. *B.D.H. Chemicals Ltd.*, Poole, Dorset. 8½ x 5½ in. Pp. 235. Third edition. 50s.

Make Money in a Shop With the Help of the Buppy People. ROY NEAL. *Elliott Right Way Books*, Kingswood Building, Kingswood, Surrey. 7½ x 4½ in. Pp. 189. 3s. 6d. (paper cover).

Chelates in Analytical Chemistry, Volume 2. H. A. FLASCHKA and A. J. BARNARD JR. (editors), *Marcel Dekker, Inc.*, 95 Madison Avenue, New York, N.Y. 10016, U.S.A. 9 x 6 in. Pp. XI + 398. \$19.75.

Chemist's Guide: Basic Chemical and Physical Data. J. P. JESSON and E. L. MUETTERTIES, *Marcel Dekker, Inc.*, 95 Madison Avenue, New York, N.Y. 10016, United States, 9 x 6 in. Pp. 43. \$1.95 (Paperback).

COMMERCIAL TELEVISION

The information given in the table is of number of appearances and total screen time in seconds. Thus 7/105 means that the advertiser's announcement will, during the week covered, be screened seven times and for a total of 105 seconds.

Period—May 25-31

PRODUCT	London	Midland	Lancashire	Yorkshire	Scotland	Wales & West	South	North-east	Anglia	Ulster	Westward	Border	Grampian	Eireann	Channel Is.
Andrews liver salt	—	—	—	—	4/60	4/60	—	—	—	3/45	—	—	—	3/45	—
Askit powders	—	—	—	—	4/42	—	—	—	—	—	—	—	—	—	—
Aspro	3/44	4/97	1/7	2/37	4/74	1/7	1/7	3/67	1/7	—	3/67	3/67	2/30	—	4/97
Bellair hair spray, shampoo	11/330	6/180	7/210	7/210	—	—	—	—	—	—	—	—	—	—	—
Hold and Shine	—	—	—	3/180	—	—	3/180	—	—	—	—	—	—	—	—
Supersoft shampoo	4/90	4/90	4/90	3/60	4/90	4/90	3/60	4/90	4/90	4/90	4/90	3/60	3/60	—	4/90

Corimist Hair Treatments

Most people have a hair problem—dry hair, greasy hair or dandruff—and now Schwarzkopf solves it.

Corimist Hair Treatments solve the 3 hair problems

D Something new. CORIMIST HAIR TREATMENT - D - returns dry hair back to glowing vitality, controls brittle fly-away, silences the place hair. Herbal extracts work their way right into the hair to give it shine and sheen. Treat dry hair regularly to Corimist Hair Treatment - D - keep it in shape. And - Corimist contains a double-life setting agent to hold your hair beautifully in place.

After shampoo, massage Corimist - D - into your hair while it's still wet. Comb it through, rub it up and dry it. (Don't rinse away the goodness in Corimist.)

Corimist Hair Treatment comes in two other Corimist - A - and Corimist - G -.

G Corimist - G - gets rid of excess oils and revives greasy hair. Both contain double-life setting agents.

CORIMIST HAIR TREATMENTS too good to be missed out. Try Schwarzkopf Corimist Spray Tonic too. On sale at hardware stores, chemists and beauty counters.



Corimist Hair Treatments solve the 3 hair problems

G Something new. CORIMIST HAIR TREATMENT - G - prevents excess oils from clogging your hair and spoiling your style. Special ingredients in clear, fresh Corimist Hair Treatment - G - restore the balance of natural oils in your hair. Use it regularly for a light, soft feeling, bounce and body that lasts. And - Corimist contains a double-life setting agent to hold your hair beautifully in place.

After shampoo, massage Corimist - G - into your hair while it's still wet. Comb it through, rub it up and dry it. (Don't rinse away the goodness in Corimist.)

Corimist Hair Treatment comes in two other Corimist - A - and Corimist - D -.

D Corimist - D - revitalizes dry or damaged hair. Both contain double-life setting agents.

CORIMIST HAIR TREATMENTS too good to be missed out. Try Schwarzkopf Corimist Spray Tonic too. On sale at hardware stores, chemists and beauty counters.

Schwarzkopf CORIMIST HAIR TREATMENTS



Corimist Hair Treatments solve the 3 hair problems

A Something new. CORIMIST HAIR TREATMENT - A - beats dandruff. Specially formulated ingredients prevent dandruff, stop the hair back it can cause, and help your hair shine. Use it regularly for today's shine. Use clear, fresh Corimist Hair Treatment - A - regularly for protection against dandruff. And - Corimist contains a double-life setting agent to hold your hair beautifully in place.

After shampoo, massage Corimist - A - into your hair while it's still wet. Comb it through, rub it up and dry it. (Don't rinse away the goodness in Corimist.)

Corimist Hair Treatment comes in two other Corimist - G - and Corimist - D -.

D Corimist - D - revitalizes dry or damaged hair. Both contain double-life setting agents.

CORIMIST HAIR TREATMENTS too good to be missed out. Try Schwarzkopf Corimist Spray Tonic too. On sale at hardware stores, chemists and beauty counters.

Schwarzkopf CORIMIST HAIR TREATMENTS



NEW Corimist Hair Treatments

- D** revitalizes dry or damaged hair
- G** gets rid of excess oil and revives greasy hair
- A** Anti-dandruff treatment drives out dandruff

Individually packed, the Treatments, retail at 2/11 each to give you 33½% profit (excluding tax)

These advertisements will be seen more than 64,000,000 times in the following Women's Magazines—Woman's Own · Woman & Home · Nova · Vogue · Nineteen · She · Honey

- * Win a dream holiday for two in the Caribbean with the Corimist Hair Treatment Competition
- * Special Merchandisers give immediate impact and sales.

Order your stocks of Corimist Hair Treatments now, from your wholesaler or direct from Schwarzkopf (Corionol Ltd) 269 Field End Rd, Eastcote, Ruislip, Middx. Tel: 01-866 8733

Schwarzkopf 

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SAY HUNDREDS OF USERS!

Over the years Beautisales have received hundreds of letters acclaiming the effectiveness of Gill's Shampoo—the original and still the most efficient medicated shampoo for the certain removal of even the most stubborn forms of dandruff. It brings complete relief from scalp irritation and leaves the hair glossy, soft and supple. Here's a shampoo that fulfils its promise, with delighted users—and a constant increase in demands. You can recommend it with complete confidence.

Gill's DANDRUFF REMOVER Medicated SHAMPOO

Prices: Bottles 3/6d. (Inc. P.T.)—trade 22/- per dozen. Family size 7/11d. (Inc. P.T.)—Trade 51/- per doz. Sachets 11d. (Inc. P.T.)—trade 6/- per dozen, minimum order 3 dozen in attractive counter display carton. All trade prices plus Purchase Tax.

BEAUTISALES LTD. 35 Old Bond St.
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Eire Agents: Mac Sales Ltd. 20, Lower
Dorset St. Dublin 1.



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FAMOUS LONDON SERIES SHAVING BRUSH PARCEL

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BEFORE & AFTER SHAVING MUG PARCEL NO. 912

3 pcs. PICCADILLY	PURE BRISTLE	RETAIL 11/9
3 pcs. HYDE PARK	PURE BRISTLE	RETAIL 13/9
3 pcs. STRAND	PURE BRISTLE	RETAIL 15/9
3 pcs. BURLINGTON	PURE BRISTLE	RETAIL 18/9
3 pcs. MAYFAIR	BRISTLE & BADGER	RETAIL 21/6
3 pcs. GROSVENOR	BRISTLE & BADGER	RETAIL 26/6

COST WSP 172/7 Retail Return 324/3

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143 NEW BOND STREET, LONDON, W.1.



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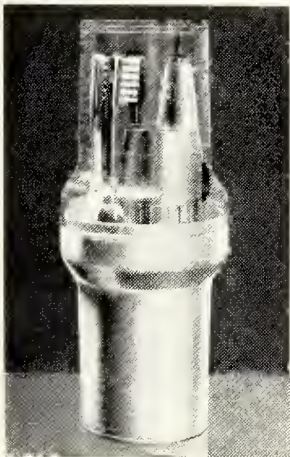
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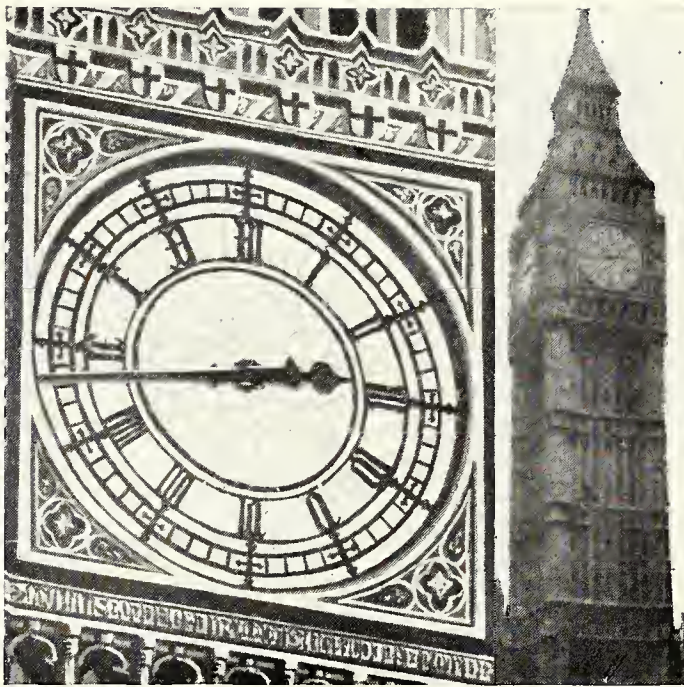


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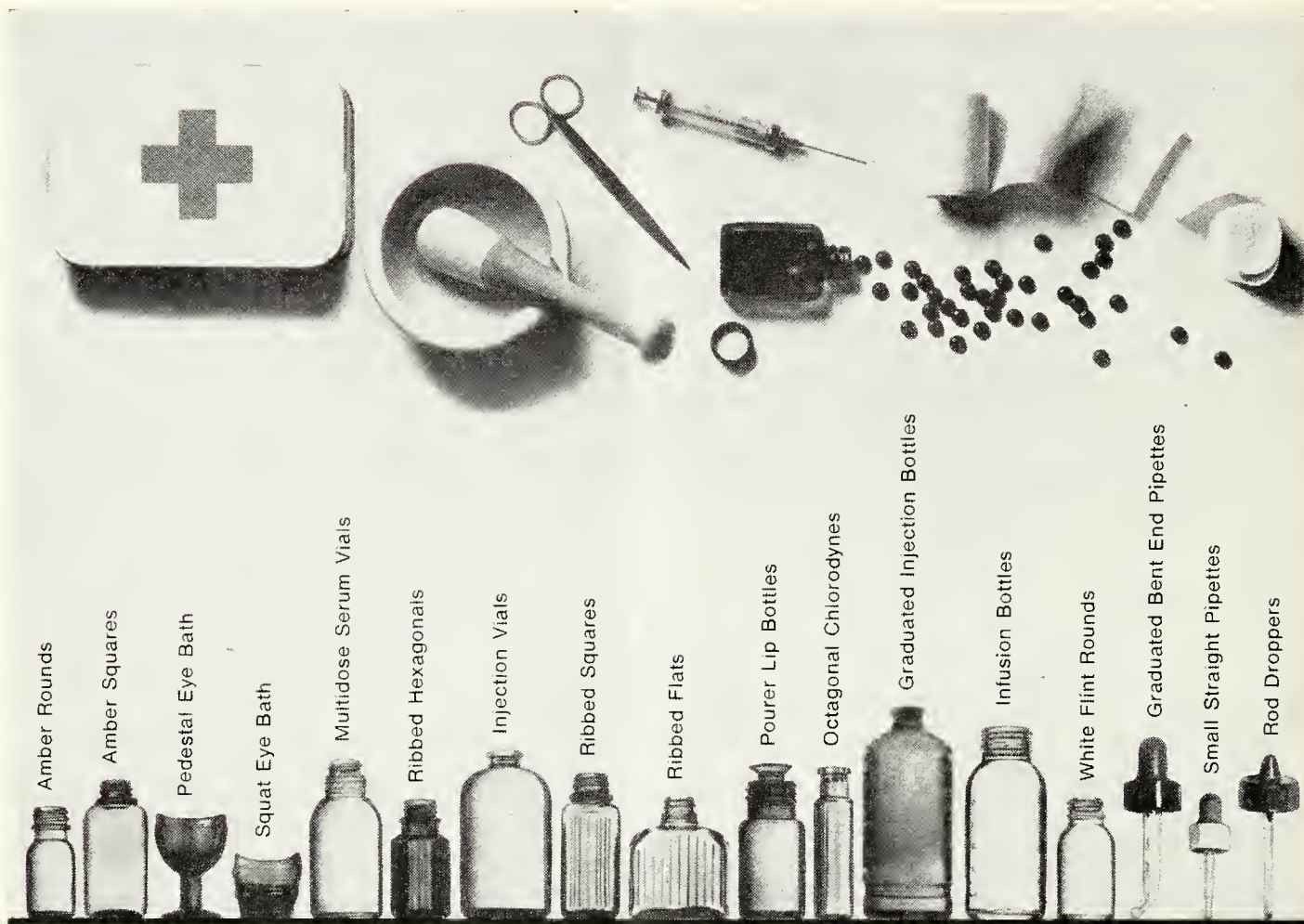
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